



PRECISION
ENGINEERING, LLC

EXCEEDING EXPECTATIONS

...

REVISED REGIONAL FACILITIES PLAN

FOR

THE CITY OF TOMPKINSVILLE

DECEMBER 16, 2019

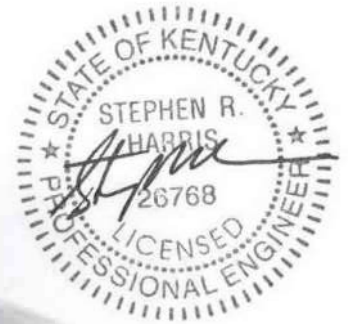


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I. REGIONAL FACILITIES PLAN UPDATE & SUMMARY

GENERAL

The previously submitted and approved Regional Facilities Plan erroneously stated that the treatment capacity of the proposed Tompkinsville WWTP improvements was 1.7 MGD. The treatment capacity of the proposed improvements to the WWTP is actually 0.80 MGD Average Daily Flow. The error was found during the permit review by the Kentucky Division of Water. For clarification, the proposed design, due to the Sequential Batch Reactor's ability to advance cycles, is able to handle an hourly peak flow of 1.27 MGD and with maximum advanced cycles (eight per basin per day) does have the capability to treat an hourly peak flow of 1.7 MGD. This submittal corrects the confusion of the design capacity and correctly states it as 0.80 MGD. Because this is a clarification, and not a change in design, the estimated cost of the project is not affected by this clarification.

The City of Tompkinsville is a fifth-class incorporated city with a population, determined by the 2010 census, of 2,402. The City is located within the East Fork of the Barren River watershed and approximately 135 river miles upstream of the Barren River confluence with the Green River.

Since the 1970's the city has provided both potable water and sanitary sewer services to its citizens. Currently, the city operates and maintains approximately 17 miles of gravity and pressure sanitary sewer systems. All sewer collected is transported to the existing 0.67 MGD Wastewater Treatment Plant (WWTP). The plant was constructed and was last expanded in 1989, nearly 30 years ago. The City of Tompkinsville is responsible for maintenance, operations and improvements of the City's utilities systems.

Due to local needs and maintenance reasons further discussed in this plan, the City is proposing to update the WWTP (WWTP), replace and/or fix 8,250 feet of the City's sewer pipes, and add 2 miles of force main to add on Joe Harrison Carter Elementary. The construction of these new facilities will alleviate a portion of the existing WWTP's flow, the City plans to expand its collection system to include service to approximately 13 new residential & commercial customers and develop a force main with a lift station that will eventually eliminate the need for the Joe Harrison Carter Elementary package plant and route the flow to the existing WWTP. The existing plant is in good condition but experiences large amounts of I/I at times. The construction of the updated plant will allow the plant to accrue a higher peak flow of 1.272 MGD and treat a higher average flow of 800,000 GPD. Along with an advancement in flows, the project will include adding new headworks and disinfection system at the plant. Throughout the sewer system many improvements will be made such as: rehab nine (9) of the lift stations, construction of one new lift station, rehab or replacement of sewer lines, and a force main extension to Joe Harrison Carter Elementary. The various replacement projects will serve as the City's effort to eliminate the I/I issue throughout the system.

This project will include the conversion of the existing Tompkinsville Extended Aeration Plant 670,000 GPD AVD to a 0.800 MGD Sequential Batch Reactor (SBR) WWTP. In addition to the plant's conversion, the project also includes the installation of a new Headworks facility, replacement of the existing chlorine disinfection system with a new Ultraviolet (UV) system, the rehabilitation of approximately 8,250 LF of dilapidated sanitary sewer collection mains, the construction of approximately 11,600 LF of new HDPE force main to Joe Harrison Carter (JHC) Elementary, installation of a new lift station at JHC to replace and decommission the existing JHC Package Treatment Facility, the installation of a new SCADA system which will be connected to the WWTP and nine (9) lift stations within the City's sewer system, and the installation of VFDs on nine (9) lift stations to optimize use and reduce power consumption. This project will eliminate 2 failing septic systems and 11 non-failing septic systems.

The topography within the planning area varies from a mostly flat rural area which is karst in nature in the outlying areas of the city limits. Most of the developed land within the region is located within the developed areas of the Tompkinsville city limits. No immediate work is to be located near or in the 1% Floodplain as determined by FEMA and/or the Kentucky Division of Water.

Historically, the City of Tompkinsville has provided potable water service to rural areas (and communities) outlying the City's corporate limits. The existing service area extends out to the Tompkinsville city limits. The current service area is the same as the planning area that we are proposing, apart from the line extension to Joe Harrison Carter Elementary School. This line will be a force main that will run along the side of Highway 163 with a new lift station to carry the sewer.

Over the years, the City's water service area has experienced growth to encompass the businesses and institutions surrounding Tompkinsville as well as expansion of the local High School and Middle School in recent decades. The City has also extended its sewerage system to outlying areas, beginning in the late 1990's, with the installation of additional sewer and lift station(s) to serve the industrial park located on the northern side of town servicing a Walmart, car dealership, strip center and several other commercial office buildings in the immediate vicinity. Sewer has been extended to the south, from KY 100 to serve a residential development and the two aforementioned schools in the early 1990's.

The City has elected to upgrade the sewage collection and treatment facilities, replace and repair the existing dilapidated sewer lines within the central section of Tompkinsville and to extend the existing service by a 4" force main approximately 2 miles north of the city limits to accommodate an elementary school.

The first phase of the project will be to upgrade the existing WWTP to a SBR system. Once the project has started the new SBR system should be installed within 12 months. The second phase of the project will be to rehabilitate the existing sewer system and this process should take up to 3 months. The third and final phase will be to add JHC elementary school to the system and this should take up to 6 months.

The 20-year Planning period for this project will cover the entirety of the proposed project starting in the year of 2019 to 2039.

The proposed plan should cost an estimated \$2,371,148.00 (itemized cost estimate can be found in Section VIII in Table 1).

The following funding agencies have approved funding for this project: Community Development Block Grant (CDBG), State Revolving Funding (SRF), and Appalachian Regional Commission (ARC). No, increase in rates is proposed for funding of this project.

II. NEED FOR PROJECT – TOMPKINSVILLE WWTP

The majority of citizens within the city limits of Tompkinsville are serviced by public sanitary sewer. That encompasses almost 1,100 owner occupied and rental residential units. All commercial businesses including about a dozen commercial eating establishments, numerous private business entities, several industrial uses, a local hospital, a nursing home facility and 3 public schools use the public sanitary sewer. Since its original implementation very few improvements have been afforded to the WWTP and little expansion of infrastructure has been done to the system to accommodate growth within the last 3 decades.

Also, the aging sewer system feeding the WWTP has created numerous instances for infiltration of pipes throughout the system. This has, at the very least, created a situation in which there is great concern for contamination of local streams. During wet weather conditions, the plant experiences a vast volume of flow increase due to the sanitary sewer collection system's dilapidation which results in severe infiltration and inflow (I/I). The volume of flow increases significantly enough such that the plant is bypassed which results in a lack of proper treatment before discharging into Curtis Branch.

Improving and upgrading public sanitary sewer facilities and repair/replace existing sewer lines to the residents of this service area will greatly improve the environmental conditions by removing the fecal coliform and pollutants from the streams, groundwater and surface impoundments.

Historically, the City of Tompkinsville has extended sanitary sewer services to accommodate and promote economic growth only as warranted on an as-need basis.

The City's selection and approval criteria typically follows the below standards:

- 1) High density areas of residential customers which currently utilize straight pipes or failing septic systems to collect and "treat" the wastewater. The City views these areas as a direct contributor to the pollutants and therefore degraded water quality of Barren River.
- 2) High density areas of both residential and commercial developments whose current treatment method of wastewater impacts the adjoining customers. These areas are typically very dense in development.
- 3) Less densely populated areas that may be served by the extension or expansion conducted in order to provide service to location of higher densities.
- 4) Location and proximity to Tompkinsville.
- 5) Proximity of the unserved customers to existing gravity sewers and/or force mains.
- 6) Areas with historic sewage problems or new locations determined to be non-sufficient to treat new developments.

The areas in which this amendment proposes to update will allow the newly upgraded WWTP to directly combat the degradation of Barren river by removing an estimated 2,160,000 GPD from sewage infiltrating into the soil. This is equivalent to treating 64,800,000 gallons per month which would generally discharge in some fashion into Barren River. The City of Tompkinsville has shown great pride in the region by assisting, treating and serving its planning area and intends to follow this trend for the areas within this proposed amendment.

A. "Need" Defined

In the early 2000's the City's economic structure was wounded when one of its leading citizen employers left for economic gains in Mexico followed shortly by another factory closing down due to consolidation. Taking this into consideration along with the housing market crash in mid-2008, there was a small decline in the population in Tompkinsville as well as the surrounding southern Kentucky regions. Many communities within the region continue to grow, as evidenced by new housing starts, influx of small business enterprises, and so forth. Particularly, in the Bowling Green area. In particular, the Tompkinsville area has enjoyed surprisingly steady development growth in recent years due to small business expansion and a small number of commercial businesses locating in the city limits.

As stated in the preceding paragraphs, the City of Tompkinsville has long recognized the need to adhere to a policy of serving the greater community. As defined by their selected planning area, that "community" encompasses 3 miles of state highway 163 and highway 63. It encompasses all of the central area of Monroe County currently served with City of Tompkinsville sewer service or slated for eventual service.

The current system serves currently 787 customers, 133 commercial units and 35 industrial units. In terms of current population, the planning area encompasses 792 residential units, 136 commercial units, 40 industrial/institutional units and Joe Harrison Carter Elementary. Currently, the majority already have service, albeit service from an inefficient system. The City of Tompkinsville is hopeful that in the near future with these improvements sewer service may be able to be offered to nearby adjacent areas of Monroe County. To the extent practicable, Tompkinsville will make public sewage available to the most needful in the "community" in as timely a manner as possible.

A predominance of straight-pipes has been identified in surprisingly few areas of the proposed expansion along HWY 163 toward Joe Harrison Carter Elementary; however, faulty septic tanks and/or inadequate leachate fields are likely prevalent among the residences throughout. With the addition of the force main along this major arterial highway it is anticipated that providing sewer service to this currently unserved portion of the community will help alleviate widespread infiltration of local streams.

While the treatment plant at Joe Harrison Elementary is currently in good working order, it has remained so at no small cost to the Monroe County School Board. The following data was obtained from the School Board in regard to costs associated with their package treatment plant for the past three years (2015 – 2017):

Motor Repairs:	\$1,669.00 annually
General Supplies:	\$500.00 annually
Labtronx (tablets/solutions, pipettes, and calibration):	\$1,266.49 annually
Western Kentucky University (Analysis of lab results):	\$513.00 annually
Tank pumping and waste disposal:	\$1,058.33 annually
PT mandated test for calibration of samples:	\$660.18 annually
Labor costs for daily checks & lab work:	\$6,000.00 annually
Employee continuing education:	\$600.00 annually
Daily plant maintenance & on call duties:	\$15,000.00 annually
	*\$27,267.00 Total Annual Costs

*Based on the average of monthly costs for 2015,16, & 17.

In addition to removing a package treatment plant, overlooking the school playground, that will inevitably fail or, at the very least, prompts obvious environmental concerns, replacing the plant with a lift station feeding the proposed public sewer system will relieve long term financial costs of the school system.

Is it estimated that there are 13 residential and commercial customers that are using on-site septic systems or straight pipes in the Planning Area. With the new force main line, we intend to pick up these customers in order to eliminate the on-site septic systems and straight pipes.

In summary, extension of public collection and upgrades to treatment facilities of sewage is much needed in Tompkinsville's planning area. The existing dilapidated sewer system coupled with the proximity of individual homes mingled with commercial and industrial use, accompanied by residences and businesses along HWY 163, including the elementary school, not served by public sewer make each faulty sanitary sewer line or improperly working septic system a problem for the entire community. Beyond the obvious environment and health/safety considerations, the prevalence of such problems in the planning area present yet another hindrance to the economic well-being of the Tompkinsville / Monroe County area.

III. PHYSICAL CHARACTERISTICS OF THE PLANNING AREA

The Planning Area specifically Includes the City of Tompkinsville as well as potential customers along the proposed force main leading to Joe Harrison Carter Elementary and areas immediately adjacent to the city that may be economically and physically possible to incorporate in the future.

The City's Planning Area encompasses approximately 4,700 acres, or 7.3 square miles. This constitutes approximately 2.2% of the land mass of Monroe County and encompasses 22.5% of the County's nearly 11,000 population.

1. Land Use

The City of Tompkinsville has no current zoning / land use regulation or any future land use projection mapping. Consequently, there are no known "restrictions" which might interfere with the repair or upgrade of the current sewage collection system. All the construction proposed for this project will take place within the public right-of-way.

****Please see Appendix C for Current Maps**

IV. SOCIOECONOMIC CHARATERISTICS OF THE PLANNING AREA

ECONOMIC & SOCIAL BENEFITS

The Planning area currently serves 787 residential customers, 133 commercial customers and 35 industrial customers. With the new expansion, we expect to see 792 residential customers, 136 commercial customers and 40 industrial customers. While the residents within the service area who have existing sanitary sewer service may not see many economic and social benefits from the sewer system upgrade, the residents and business offered service by way of the proposed force main should see an increase in their property assessments resulting in economic gains for the property owner and increased property tax revenues within the locality. With the new availability of public sewers, land that was previously undevelopable for a lack of wastewater disposal should now become much more attractive for development. Commercial and residential developments will then have the opportunity to expand or be planned with the availability of public utilities. Industries can now be recruited that provide replacement jobs that have been lost due to the severe and drastic downturn of developers leaving due to economic gain.

Not only will the residents see an economic benefit, but the City will see the greatest benefits of all. By upgrading the WWTP facilities, it will drive the cost down of their entire operation. The City of Tompkinsville pays around \$8,000 dollar monthly which is \$96,000 dollars annually just spent on the electricity. Once the entire facility has been upgraded it is estimated that the new cost of the electricity will be around \$3,500 dollars a month or \$42,000 dollars annually. In addition, the plant can operate on fewer employees since the entire system will be automated. In addition to the money saved by the City in regard to efficiency the City will also be alleviated of the fines incurred annually due to environmental mitigation which is again related to their delapidated system.

With new jobs and income available the economy of the entire region will benefit. Without access to proper wastewater collection and treatment the area will continue to slip into the depressed conditions.

The City of Tompkinsville is a fifth-class city incorporated under the laws of the Commonwealth of Kentucky. According to data derived from the 2010 US Census, the population of Tompkinsville is projected at 2,402 for the year 2010, while the population of Monroe County is estimated at 10,963.

U.S. CENSUS HISTORICAL POPULATION DATA

<u>YEAR</u>	<u>TOMPKINSVILLE POPULATION</u>	<u>% CHANGE</u>	<u>MONROE COUNTY POPULATION</u>	<u>% CHANGE</u>
2040	2181	-4.8%* KSD Ctr. % avg.	8,567	-10.1%
2030	2291	-4.8%* KSD Ctr. % avg.	9,474	-7.9%
2020	2304	-4.8%* KSD Ctr. % avg.	10,291	-6.1%
2010	2402	-8.5%	10,965	-6.8%
2000	2615	-10.6%	11,739	2.7%
1990	2908	-5.6%	11,426	-7.8%
1980	3077	32.9%	12,353	5.1%
1970	2207	5.4%	11,739	-.5%
1960	2091	11.7%	11,799	-15.4%
1950	1859	25.5%	13,770	-2.1%
1940	1438	51.4%	14,070	7.3%
1930	850	16.4%	13,077	-8.3%
1920	721	-	14,214	-

* Population determined by the US Census Bureau.

*Projected population determined by Kentucky State Data Center University of Louisville

V. EXISTING ENVIRONMENT IN THE PLANNING AREA

The Planning Area includes the City of Tompkinsville and any surrounding areas of Monroe County in which it is economical and plausible to expand. The Planning area excludes all areas that lie outside the incorporated City limits of Tompkinsville other than the proposed force main which will service Joe Harrison Carter Elementary.

The City's Planning Area encompasses approximately 4,700 acres, or 7.3 square miles. This constitutes approximately 2.2% of the land mass of Monroe County and encompasses 22.5% of the County's nearly 11,000 population.

a. Topography

The topography of the Planning Area is a relatively flat area with some slight gentle slopes. This area lies in Southern Kentucky within the Mississippian Plateau area on the southern border of Kentucky. Tompkinsville is the county seat residing in the center of Monroe County which itself is very diversified in elevation and topography. The topography varies from highly dissected in the eastern part to moderately and mildly dissected in the western and central areas of the county. The highest elevation lies in the extreme eastern portion of the county and reaches 1,141 feet while the elevation of Barren River in the western portion of the county is at 595 feet. Tompkinsville, lying in the center of the county has an elevation of 923 feet at the courthouse on the town square.

b. Soils

The area surrounding Tompkinsville is rolling to hilly land. Town Creek runs through the eastern part of town and Curtiss Branch flows west of the city. The area lies in the Mississippian Plateau geologically and is underlain with shale, limestone, and sandstone. The soil is a predominately a silt loam and is suited for cropland, pasture and woodland. Ground water depth varies with the seasons and the average annual rainfall for the area is 52 inches.

The primary soil association in the Planning Area is the Garmon Series. It consists of moderately deep, well drained soils that have moderately rapid permeability. These soils formed in residuum of shaly limestone, calcareous shale, and siltstone.

c. Geology

As noted, the Planning Area lies within Mississippian Plateau. The two Principal natural resources of Monroe County are lumber and agriculture; Monroe County is one of the leading agricultural producers in the state. The entire region surrounding the work area has been classified as “karst” in nature. This term refers to landscapes characterized by sinkholes, springs, stinking streams and underground drainage through solution-enlarged conduits or caves. Karst landscapes form when slightly acidic water from rain and snowmelt seeps through soil cover into fractured and soluble bedrock, typically limestone, dolomite or gypsum.

d. Surface Waters

(1) Water Quality

The East Fork of the Barren River is the master drainage of the Planning Area. Primary creeks draining into the Barren includes Curtis Branch, Town Creek, and Mill Creek. Within the drainage area numerous springs with flows ranging from a few gallons per minute to 5,000 gallons per minute are found in the county. Minimum flows generally occur in early fall, maximum flows in late winter.

As previously mentioned Tompkinsville’s water quality is severely impaired and a good portion of that is due to the treatment procedures that must take place because of sewage infiltration. Published drinking water quality reports show that results conducted by the utility company and provided to the Environmental Working Group (EWG) by the Kentucky Department for Environmental Protection yielded the following results:

There were three contaminants detected above health guidelines and seven other detected contaminants which includes chemicals detected in 2015 for which annual utility averages exceeded an EWG selected health guideline. These contaminants include chromium (hexavalent), radiological contaminants, and total trihalomethanes (TTHMs).

Pollution sources determined to be the source from which the contaminants originated include agriculture, industry, treatment byproducts, runoff & sprawl, and those which occur naturally.

(2) Flooding

Sanitary sewers are typically extended along roadways. In those situations, where the roads are subject to flooding, gravity sewer systems will be protected with watertight lids at or below the 25-year flood; furthermore, lift systems entranceways will be elevated above the 25-year level and all control panels placed above 100-year flood level.

By definition, the line extensions do not constitute obstructions to the floodway. However, treatment plant features are frequently located above grade. As such, the site of the plant expansion as well as the improvements to the WWTP will be analyzed in accordance with KYDOW requirements, during the design phase, to ensure that any flood plain encroachment(s) do not exacerbate existing flood conditions.

(3) Unique Features

Most of the projects proposed herein entail replacement of sewage service and extension of service along existing roadways. Construction disturbances will largely be limited to highway shoulders, residential yards, developed commercial properties, and the like. As such, no wetlands, nor other environmentally sensitive areas, should not be encountered. Should additional environmental review, during the preliminary design stage, indicate the presences of wetlands, archaeological and/or historically significant sites, or other unique features within the Planning Area boundaries, it remains unlikely that the proposed would represent a threat to such features. Nonetheless, as individual sites are proposed for funding, the possible environmental consequence of each action will be more fully evaluated on a site-specific basis. According to Water Health Portal and the report to congress, Mill Creek lake is in good standing to provide safe Drinking water.

VI. EXISTING WASTEWATER SYSTEM

The existing wastewater treatment facilities were constructed in 1969 east of Tompkinsville on Poplar Logging Road. The plan effluent flows into Curtiss Branch, a tributary of Mill Creek, which flows west to the East Fork of Barren River. This facility provides treatment using the activated sludge process which can treat up to .67 MGD. It was then upgraded in 1996 utilizing a sludge press making the drying bed obsolete. Raw sewage flows from a 12-inch pipe through a bar screen and comminutor. Flow then reaches a mechanical auger and flow reaches a wet well where it is pumped to the aeration tanks; then from the two 86 x 43-foot aeration tanks to two secondary settling tanks. From these 16.5 x 32 foot settling tanks to a chlorine contact tank and then through a 12-inch outfall to Curtis branch. Sludge is removed from settling tanks to the sludge press, the water from the sludge is then rerouted back to the settling tanks. The compressed sludge is then hauled off to a landfill. The current average flow, according to the DMR data provided by the City, the plant is receiving .544 MGD (82% design capacity), but during that span of time, 10 out of the 12 months received a max daily flow greater than .67 MGD with more than 30% of them doubling the design capacity.

The pumping station has two variable speed pumps rated at 200 GPM each at 25 feet TDH and 870 rpm; or 800 GPM total capacity at 32 feet TDH and 1150 rpm. The plant presently treats flows ranging from 0.2 to .67 MGD.

The current WWTP have had several NOV's issued over the past couple of years. In 2016 a few Nov's were issued to the City of Tompkinsville. In January a WW CEI-Minor Mun was performed for the year 2015 and it was found that Effluent have been violated for the following excursions: June 2015 Total Cl₂, July 2015 E. Coli, August 2015 DO% and E. Coli, September 2015 DO% and E. Coli, and November 2015 Solids Suspended % removal. In July another NOV was given for Total Suspend Solids, TRC Concentrations, BOD loadings, E. Coli, DO%, and Suspended Solids removal.

In 2017, several NOV's were issued following up an inspection done in January. One of the violations included the Chlorine system had failed allowing E.coli excursions to occur. During the Review of the DMR data of the 2016 year, they found each month had violated it effluent limitations in each category: Jan - Total Cl₂ (% removal); Feb – TSS, E.coli, % removal; May thru Sept.- E.coli. Due to Disinfection requirements, the WWTP needs to store tanks of chlorine gas. This proposes a danger to plant operators and to the building surrounding the plant. By introducing another method of disinfection, i.e. ultraviolet light or peracetic acid, this will greatly reduce the chance of harm coming to the operators or the community around them. The City has given the State corrective actions but none are feasible until their plant is upgraded and the I/I issue is fixed. Most of all NOV's given are based upon exceeding limits. All NOV's and DMR Data can be found in Appendix C.

The Primary time for the City of Tompkinsville to be out of compliance with their permit falls during the rainy times of the year. Due to the impaired piping system a great amount of water rushes into the

plant, with the existing system that can only handle a flow of .67 MGD and the DMR data shows a peak daily flow at 1.5 MGD, therefor causing overflowing issues. There are no pretreatment processes for any industries.

There is an approximate 90,000 Lineal feet of sewer line throughout the service area and 11 pump stations that are placed strategically throughout the system. 2 of the 11 pump stations are recently new and still in good conditions but the other 8 are outdated and in need of upgrades or replacements. As previously discussed, Joe Harrison Carter Elementary School has their own private package treatment plant that treats up to 5,000 GPD. Its condition is poor, and its O&M cost are high. Also there are an approximated number of straight pipes and failing systems through the planning area which is estimated to be around eleven (11).

Table 6.1 Tompkinsville Pump Stations

Lift Station	No. of Pumps	Capacity (GPM)
Castle Heights	2	160
Carmen St	1	10
Crawford St	2	600
Grandview Church of Christ	2	300
Hospital	2	
KY Apparel	1	80
North St	2	100
Pennington	2	150
Radio Station Rd	2	200
Senior Apartments	2	
Senior Citizens Center	2	80

The amount of pollutants is the same as the current loading (which and be found in Table 7.1). the current loadings that the existing WWTP sees on a daily bases would be average for a normal WWTP. The concentrations of the loading has went down due to the amount of inflow into the system, because of influx in flow, the current system is unable to handle the extra water, therefore the permit violations.

On-site Treatment Facilities

The vast majority of residences in the Planning area utilize the public sewage system. Unfortunately, with the aging and failing system this only creates further concern for the local groundwater contamination. Homes and businesses that do use a self-contained septic system and Joe Harrison Carter Elementary which has its own Package Treatment Plant (PTP) only add to this dilemma.

1. Collection Systems

a. General

Tompkinsville has approximately 90,000 linear feet of sanitary sewer. This includes 1,200 feet of 4-inch pipe, 8,400 feet of 6-inch pipe, 77,000 feet of 8-inch pipe, and 3,200 feet of 12-inch pipe. The sewer system is mostly gravity composing of 67,000 feet gravity and 13,000 feet force main. Sewer depth ranges from 3 feet to 12 feet and the average man hole depth is 4 feet.

There are 226 manholes in the system most of which are brick and mortar construction. There are two pump stations in the city. Both have two pumps, each capable of delivering 60 GPM and are located on East Third Street and Magnolia Street, respectively. The older part of this system was constructed in 1948 with additions and changes made in 1969.

The majority of the manholes and sewer lines in the system are in very poor condition. Leading to a lot of infiltration and inflow.

No storm sewer map for the city exists and no estimates of total footage or number of cross-connections to the sanitary system are available.

(1) Gravity

Some of the sewers in the downtown area of Tompkinsville date back to the 1930's and 1940's, having been installed as part of the depression-era WPA program. Approximately 10 miles of gravity sewer was installed in 1961-63, consisting largely of 8 and 10-inch vitrified clay lines. That construction provided service to the entire incorporated area as it existed at that time and still represents the bulk of the City's service. Since then, several gravity extensions have been completed, totaling approximately 3 and one-half miles of gravity lines.

2. Treatment

The City of Tompkinsville owns and operates a 0.670 MGD wastewater treatment plant (WWTP). Currently the City utilizes an Extended Aeration WWTP, also known as an "activated sludge process". This process involves the means of applying suspended-growth microorganisms to breakdown wastes, aerating the air and liquid then agitating the liquid to promote surface absorption of air.

Effluent is chlorinated and dechlorinated prior to discharge into Curtis Branch at Mile Point 0.80.

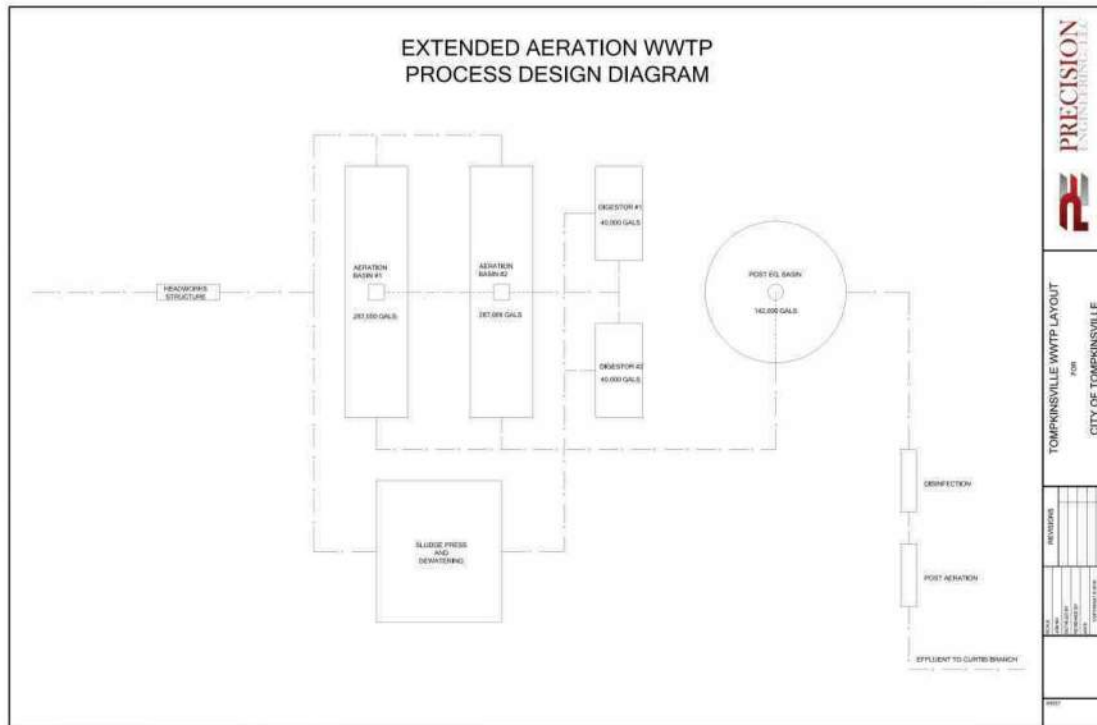
3. Compliances

The City of Tompkinsville has always operated their sewage collection and treatment facilities with the utmost professionalism. Due to the dilapidated state of the current system, however, the city of Tompkinsville was ordered in 2016 to complete the following tasks by the Kentucky Department for Environmental Protection:

- Make permanent repairs to the SCADA/telemetry system.
- Replacing both coagulant pumps.
- Create and maintain complete operational and analytical records.
- Repair the fluoride dispensing system.

All mandates have been accomplished and implemented. The EPA reports the following information regarding pollutants by pound in the planning area:

Pollutant Name	Total Pounds (lbs/yr)
Solids, total suspended	3,017,115
Nitrogen	16,385
BOD, carbonaceous, 05 day, 20 C	2,163
Phosphorus	1,788
BOD, 5-day, 20 deg. C	677
Ammonia as N	395
Oil and grease	59.8
Aluminum	15.3
Total Residual Chlorine	14.7
Solids, total dissolved	0
Chloride	0
Inorganic Nitrogen	0
Iron	0
Total Kjeldahl Nitrogen	0



**** Current process design schematic of extended aeration WWTP.



**** *Current Layout of Tompkinsville WWTP.*

VII. FORECASTS OF FLOW & WASTELOADS IN THE PLANNING AREA

PROJECTED WASTEWATER FLOWS

The projected wastewater flows depicted herein were tabulated by field collected data of existing customers as well as potential residential and commercial establishments.

TOMPKINSVILLE WWTP – CURRENT FLOWS/LOADINGS

Average Daily Wastewater Flow Estimated

<i>787 Existing Residential Units @ 350 GPD</i>	<i>=</i>	<i>275,450 GPD</i>
<i>133 Existing Commercial Units @ 700 GPD</i>	<i>=</i>	<i>93,100 GPD</i>
<i><u>35 Ex. Industrial/Institutional Units @ 1,000 GPD</u></i>	<i>=</i>	<i><u>35,000 GPD</u></i>
<i>Total</i>	<i>=</i>	<i>403,550 GPD</i>

Average Daily Wastewater Loadings

• Current Avg. Flow Q_{AVG}	494,083 GPD
• Influent TSS	93.30 mg/L/day
• Effluent TSS	10.03 mg/L/day
• Influent BOD	162.0 mg/L/day
• Effluent BOD	0.128 mg/L/day
• Effluent DO	8.670 mg/L/day
• MLSS	434.4 mg/L/day
• SVI	63.75 %
• Effluent TCR	1.242 mg/L/day
• Effluent Ammonia	1.193 mg/L/day
• Influent Phosphorus	3.282 mg/L/day
• Effluent Phosphorus	2.171 mg/L/day
• E Coli	23.84 mg/L/day
• Total Nitrogen	10.03 COL/100ml
• Effluent PH	7.321

Table 7.1 Average Loading/Flows

Loading/Flow	Commercial/Industrial	Residential	Total	Unit	Total	Unit
Current Avg. Flow Q _{AVG}	0.128	0.275	0.494	MGD	0.494	MGD
Influent TSS	121.829	262.490	384.319	lbs/day	93.300	mg/L
Effluent TSS	13.101	28.228	41.329	lbs/day	10.033	mg/L
Influent BOD	211.536	455.770	667.306	lbs/day	162.000	mg/L
Effluent BOD	0.168	0.361	0.529	lbs/day	0.128	mg/L
Effluent DO	11.330	24.411	35.741	lbs/day	8.677	mg/L
MLSS	567.252	1222.186	1789.438	lbs/day	434.417	mg/L
SVI	20.209	43.541	63.750	%	63.750	%
Effluent TCR	1.622	3.495	5.117	lbs/day	1.242	mg/L
Effluent Ammonia	1.558	3.356	4.914	lbs/day	1.193	mg/L
Influent Phosphorus	4.285	9.233	13.518	lbs/day	3.282	mg/L
Effluent Phosphorus	2.835	6.107	8.942	lbs/day	2.171	mg/L
E Coli	7.558	16.284	23.842	COL/100m l	23.842	COL/100m l
Total Nitrogen	20.294	43.725	64.019	lbs/day	15.542	mg/L
Effluent PH	2.321	5.000	7.321	S.U.	7.321	S.U.
I/I	-	-	0.091	MGD	.091	MGD

TOMPKINSVILLE WWTP – PROJECTED FLOWS**Anticipated Average Daily Wastewater Flow**

792 Existing & New Residential Units @ 350 GPD = 277,200 GPD

136 Existing & New Commercial Units @ 700 GPD = 95,200 GPD

40 Ex. Industrial/Institutional Units @ 1,000 GPD = 40,000 GPD

Joe Harrison Carter Elem. @ 5,000 GPD = 5,000 GPD

Total = 417,400 GPD

WWTP Design Flows

Average Daily Flow = 417,400 GPD

Peaking Factor = 4.0

Peak Daily Flow = 1,159.4 GPM

With an average daily flow of 417,400 GPD the minimum plant capacity required to treat the wastewater is 463,780 GPD (417,400 GPD / 0.90). The proposed SBR will be designed to treat 800,000 GPD, which is more than adequate to treat the anticipated flows.

Table 7.2 Projected Loadings/Flows

Loading/Flow	Commercial/Industrial	Residential	Total	Unit	Total	Unit
Current Avg. Flow Q_{AVG}	0.140	0.277	0.465	MGD	0.465	MGD
Influent TSS	127.631	264.158	391.788	lbs/day	101.062	mg/L
Effluent TSS	13.725	28.407	42.132	lbs/day	10.868	mg/L
Influent BOD	221.609	458.666	680.275	lbs/day	175.478	mg/L
Effluent BOD	0.176	0.363	0.539	lbs/day	0.139	mg/L
Effluent DO	11.869	24.566	36.435	lbs/day	9.399	mg/L
MLSS	594.264	1229.951	1824.215	lbs/day	470.558	mg/L
SVI	21.171	43.818	64.989	%	64.989	%
Effluent TCR	1.622	3.495	5.117	lbs/day	1.320	mg/L
Effluent Ammonia	1.632	3.378	5.010	lbs/day	1.292	mg/L
Influent Phosphorus	4.489	9.291	13.780	lbs/day	3.555	mg/L
Effluent Phosphorus	2.970	6.146	9.116	lbs/day	2.351	mg/L
E Coli	7.918	16.387	24.305	COL/100ml	24.305	COL/100ml
Total Nitrogen	21.260	44.003	65.263	lbs/day	16.835	mg/L
Effluent PH	2.431	5.032	7.463	S.U.	7.463	S.U.
I/I	-	-	0.048	MGD		MGD

PROCESS DESIGN DATA FOR PROPOSED TOMPKINSVILLE WWTP UPGRADES

B. Design Parameters

- Design Flow Q_{AVG} 800,000 GPD
- COD to SBR 434 mg/l total
- COD Removed 375 lbs/day
- BOD to SBR 700 lbs/day
- Effluent BOD < 20 mg/l
- BOD Removed 234 lbs/day
- TSS to SBR 400 lbs/day
- Effluent TSS < 30 mg/l
- Influent NH₄-N 25 lbs/day
- Influent TKN 46 lbs/day
- Effluent NH₃-N < 4.0 mg/l
- Influent Phosphorus 13 lbs/day

- Effluent Phosphorus < 2.0 mg/l

C. Process Parameters

- Average COD Removed 375 lbs/day
- Average Net Sludge Yield 895 lbs/day
- Required Aerobic Mass 4,500 MLSS
- Aerated Portion of Cycle 50 %
- Required total SBR volume 0.51 MGD

D. SBR Basin Design (Rectangular Basins)

- Number of SBR Basins 2
- Length/Width Ratio 2.0:1
- Length 90 ft
- Width 45 ft
- TWL at Design Average Flow 10.4 ft
- Total Volume in SBRs 0.758 MG
- Total Retention Time in SBR 29.7 hours

E. Oxygen Requirement

- Design AOR 3,669 lbs. O₂/day

F. Process Design

- No. of batches/day/SBR 4.0 per SBR
- Maximum Fill Time 3.0 hrs. per basin
- Complete Cycle Time 6.0 hrs. per basin
- Fill Time at Design Flow 3.0 hrs. per basin
- Anoxic Fill Time 1.5 hrs.
- Aerated Fill Time 1.5 hrs.
- React Time 1.5 hrs.
- Settle Time 0.75 hrs.
- Decant Time 0.40 hrs.
- Idle Time 0.35 hrs

G. Aeration System Design

- Aeration elevation 1.5 ft
- Nozzle Cant 0 degrees
- Average Aerator Submergence 16.0 ft
- Total Aeration Time 3.0 hrs/cycle

- SOR for Aeration Design 28 lbs/hr/basin
- Design Gassing Rate 36.3 SCFM/jet
- Site Gassing Rate 36.5 SCFM/jet
- Absorption Efficiency 24.7 %
- Design Air Flow 1,295 SCFM
- Jets required per basin 3 Model 40 Jets
- Jet Header per basin 1 Type C, Orientation L
- Jets per Header 3 Model 40 Jets

H. Blower Design Calculations

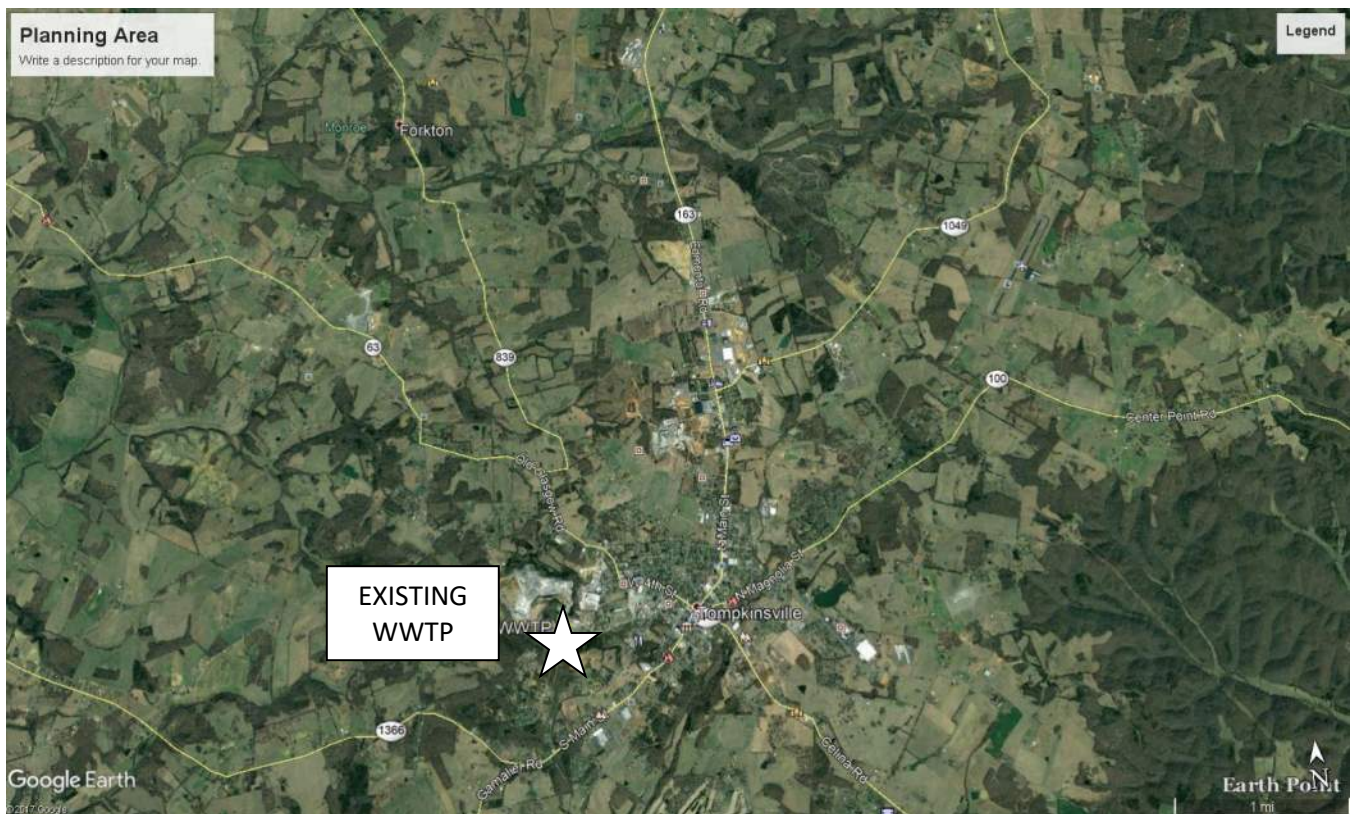
- Operating Blowers 1 per aerating basin
- Type of Blowers Rotary, pos. displacement
- Total Number of Blowers 2 including spare
- Air flow per blower 1,400 SCFM
- Net Inlet Pressure 13.99 psia
- Static Head + Aerator Loss 7.02 psig
- Total Discharge Pressure 8.02 psig
- Design ambient temperature 100 ° F

I. Pump Design Calculations

- Number of Pumps 1 per basin
- Type of Pumps Submersible Centrifugal
- Total number of Pumps 2
- Flow per Pump 549 GPM
- Required Jet Head 17.0 ft
- System Headlosses 1.0 ft (assumed)
- Total Pump Head 18.0 ft
- Assumed Pump Efficiency 68 %
- BHp per Pump 3.7 BHp/Pump
- Total pump BHp/Basin 3.7 BHp/Basin

J. Decanter Sizing

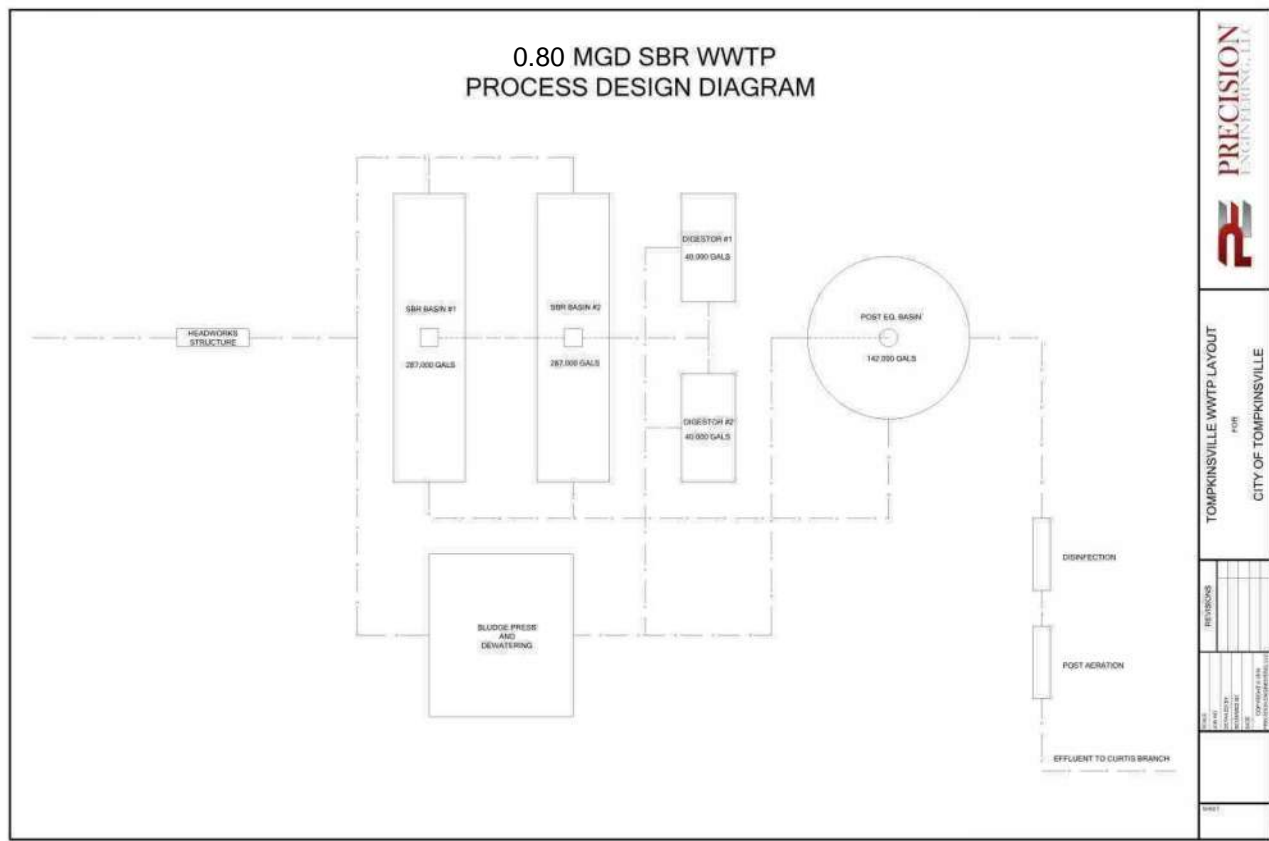
- Cycles per day 8
- Volume per decant 12,500 Gal @ Design Flow
- Decant Time 0.40 hrs
- Average Decant Flow 2356 GPM



**** City of Tompkinsville & Project Location**



***** Preliminary layout of proposed changes to existing WWTP.**



**** Proposed process design schematic of SBR WWTP.

VIII. EVALUATION OF ALTERNATIVES

NO ACTION ALTERNATIVE

The No Action Alternative will provide no effort to clean the streams and environment within the service area; resulting in continued public health hazards and polluted streams. Curtis Branch and surrounding areas will remain impaired. The water qualities within the streams will never acquire high-quality standards resulting in the depletion of environmental conditions, living standards and conditions, and further degradation of health and attitudes within the entire service area. Property values and population will continue to decline.

OPTIMIZATION OF EXISTING FACILITIES

The City of Tompkinsville owns and operates the Tompkinsville 0.670 MGD WWTP within its planning area. This plant's collection system and processing components often experience high volumes of infiltration and inflow (I/I). This plant was constructed in the 70's and has since undergone an expansion taking place in 1989. The areas proposed to be served by the Tompkinsville WWTP when considering the repair/replacement of the existing dilapidated sewer lines and additional area added by the force main will produce an average daily flow of 421,150 GPD and with a peak flow of 1.685 MGD. If the existing plant were to accept this flow the plant would be over capacity and unable to adequately treat the wastewater. Therefore, in order to serve the areas proposed by this amendment the WWTP would need to be converted to an SBR system. The proposed SBR system provides an Average Daily Flow of 0.80 MGD, peak hourly flow (normal cycles; 6 per basin per day) of 1.27 MGD, and a peak hourly flow with advanced cycles (8 per basin per day) of 1.696 MGD. The treatment capabilities of the proposed SBR are sufficient and adequate for the anticipated flows.

REGIONALIZATION – TOMPKINSVILLE WWTP PROJECT

Regionalization has always been an important concept to the City of Tompkinsville. By implementing the proposed changes to the WWTP, the City of Tompkinsville will not only be able to serve customers currently unserved and improve water quality for those currently served, but also create an avenue in which future growth by providing service to adjacent areas of the unincorporated area of the county may be a reality.

Alternative Considerations

The SBR treatment will be the best alternative for the City of Tompkinsville based upon variety of reasons: (1) the amount of money saved from energy consumption will greatly help the City keep up

with there outstanding O&M cost. (2) utilizing the SBR System will ease the operation of the plant, giving operators more time to maximize the plants capability. (3) Having the SBR system will cut out all of the I/I issues and overflows occurring at the plant which will in turn have less of an impact on the state of Kentucky's waterways. (4) The flexibility of the SBR's operating capacity allows for additional flows to be directed to the plant and properly treated. The SBR has the flexibility in its operations to treat the additional flow produced by the proposed sewer extension.

When the current WWTP is under rehabilitation some changes in equipment will occur such as: (1) the aeration basins will become the new SBR basins, (2) the existing clarifier will become the new EQ Basin, (4) the headworks will be replaced by new ones, (5) and the chlorine disinfections will be replaced by Peracetic Acid disinfection.

The proposed Tompkinsville WWTP will be designed and constructed based on experience at other facilities and to meet the applicable requirements under Chapters 50, 70 and 90 of the Ten States Standards. Continuity and reliability of treatment equal to that of the continuous flow through modes of the activated sludge process will be provided.

The required degree of wastewater treatment will be based on the effluent requirements and water quality standards established by the regulatory agencies including discharge permit requirements. Effluent limitations provided for this project by the Division of Water, WLA Coordinator are as follows:

Design Capacity = 0.800 MGD / Discharge near NHD RM 1.1 of Curtis Branch

<u>PARAMETER</u>	<u>MAY1 - OCTOBER 31</u>	<u>NOVEMBER 1 – APRIL 30</u>
<u>BOD5</u>	20 mg/l	20 mg/l
<u>TOTAL SUSPENDED SOLIDS</u>	30 mg/l	30 mg/l
<u>AMMONIA NITROGEN</u>	4 mg/l	10 mg/l
<u>DISSOLVED OXYGEN</u>	7 mg/l	7 mg/l
<u>TOTAL PHOSPHORUS</u>	Monitor, mg/l	Monitor, mg/l
<u>TOTAL NITROGEN</u>	Monitor, mg/l	Monitor, mg/l

****Reliability Classification = Grade C**

The plant design will provide the necessary flexibility to perform satisfactorily within the expected range of waste characteristics and volumes. Testing, including appropriately composite samples, under various ranges of strength and flow rates (including diurnal variations) and waste temperatures over a

sufficient length of time to demonstrate performance under climatic and other conditions which may be encountered in the area of the proposed installations.

ALTERNATIVE TREATMENT PROCESS A: OPTIMIZATION BY SBR TREATMENT PROCESS

INFLUENT SCREENING

We are proposing to replace the old dilapidated auger and install a new Auger Modular Headworks System into the existing headworks structure. This wastewater screen serves as a grinder, fine screen, and a compactor. First, a grinder shreds all clumps of rags and long stringy material. Next, the solids are captured by a perforated plate screen and removed by a rotating auger. As the solids are removed, dual wash water zones clean-off fecal material. The rotating auger then conveys solids to the discharge point where the integrated compactor squeezes out water before depositing the cleaned and dried material into a dumpster. The clean discharge keeps odors to a minimum and lowers disposal costs, as less water and fecal material are sent to the landfill. A bypass is already installed and will be utilized manual bar screens.

SBR TREATMENT PROCESSES

After the wastewater has left the influent screening the wastewater will be pumped into the new SBR basin. The new SBR will be in the located where the old aeration basins use to be.

During **Anoxic Fill**, the basin is loaded with food from the influent through an influent distribution manifold which creates a high food to microorganism (F/M) ratio with zero dissolved oxygen (DO) conditions. The fill period is primarily anoxic, or without aeration. Aeration is usually initiated late in the Fill period, and continues in the React period, after the influent flow has been diverted to another basin. The influent manifold allows intimate contact of the influent (food) with the settled biomass in the sludge blanket throughout the length of the basin. During this time, the soluble BOD is absorbed and stored by the facultative biomass until air is received to metabolize the food. The selective pressures exhibited on the biomass of zero DO in Anoxic Fill allows good settling, facultative organisms to predominate.

After about 75% of the fill period is complete, the blowers and pumps are automatically turned on to provide air and complete mixing which initiates the “feast” environment for the biomass. The biomass begins to metabolize the food they have absorbed. They utilize the oxygen provided very rapidly with high DO uptake rate and low residual DO values. It is during the initial stages of **Aerated Fill** that both Nitrification and Denitrification occur. The ammonia is converted to nitrates within the

highly-aerated plume of the jet. The nitrates are converted to nitrogen gas in the low DO areas of the basin. The denitrifying organisms use the BOD as a food source and the oxygen off the nitrates converting the nitrates to nitrogen gas.

React begins after the basin has completed filling, and the influent flow has been diverted to another SBR tank. No more food (influent) enters the reactor basin during React. This forces the organisms to scour for any remaining BOD. Aeration continues in the full reactor until complete biodegradation is achieved; mixed liquor is drawn through the manifold and used as motive liquid for the aerator. React continues until the food is consumed and the biomass enters its “famine” state. True react is critical to achieve intense famine conditions for optimum organism selection. Tests have shown that the food is consumed when the residual DO begin to rise quickly.

The biomass is allowed to **settle** in perfect quiescent conditions; no influent is introduced during settle and no effluent is decanted. Since the reactor is under true quiescent conditions during settle, 100% of the reactor capacity is available for liquid/solids separation. The relative loading rate during clarification is zero for the batch reactor.

Following the Settle cycle the effluent withdrawal or **Decant** cycle begins. Decant is initiated by opening an automatic valve. Treated effluent is discharged through a decanter from approximately 18 inches below the surface, avoiding discharge of any surface contaminates. Decant continues until approximately the upper 1/3 of the basin is discharged.

While the reactor waits in **idle** to receive flow, settle sludge is drawing through the manifold and pumped to the digester. The jet motive liquid pump is utilized as a waste sludge pump. The settled sludge is withdrawn through the sludge collection manifold, which runs the length of the basin. The multi-point sludge withdrawal yields the thickest sludge possible, reducing side stream sludge treatment operation and maintenance.

PERACETIC ACID

Similar to chlorine, peracetic acid is an oxidizing agent. It oxidizes the outer cell membrane of bacterial cells by disrupting the function of the lipoprotein cytoplasmic membrane and the transport of electrons (i.e. the stronger the oxidizer, the faster the electrons are stripped from the microorganisms

or die). Introduction of this type of disinfection will eliminate in the constant transportation of chlorine gas because less is used.

POST AERATION

An existing Post Aeration concrete basin is already installed at the plant site and will continue to be utilized. The existing air piping will be connected to the new energy efficient blowers which will be installed as part of this project. This system will provide assurance that a safe and habitable level of oxygen is available in the final effluent prior to discharging into Curtis Branch.

SLUDGE HANDLING

The City of Tompkinsville has an existing sludge belt press facility in very good condition. The belt press and facility were constructed in 2012 and will be more than sufficient to provide dewatering and sludge compaction for this proposed project.

TABLE 1		
TREATMENT ALT. A - SBR PROCESS		
UNIT PROCESS		Tompkinsville WWTP
HEADWORKS		\$ 80,000.00
SBR EQUIPMENT		\$ 570,000.00
SLIP-LINING		\$ 330,000.00
TELEMETRY		\$ 165,000.00
FORCE MAIN		\$ 348,000.00
JHC LIFT STATION		\$ 125,000.00
DISINFECTION		\$ 150,000.00
SSES		\$ 150,000.00
ENGINEERING/CONST. INSPECT/BID ADMIN & CONTINGENCIES		\$ 453,148.00
Estimated Construction Costs		\$ 2,371,148.00

ALTERNATIVE TREATMENT PROCESS B: OPTIMAIZTION BY REVERSE OSOMOSIS TREATMENT PROCESS**INFLUENT SCREENING**

We are proposing to replace the old dilapidated auger and install a new Auger Modular Headworks System into the existing headworks structure. This wastewater screen serves as a grinder, fine screen, and a compactor. First, a grinder shreds all clumps of rags and long stringy material. Next, the solids are captured by a perforated plate screen and removed by a rotating auger. As the solids are removed, dual wash water zones clean-off fecal material. The rotating auger then conveys solids to the discharge point where the integrated compactor squeezes out water before depositing the cleaned and dried material into a dumpster. The clean discharge keeps odors to a minimum and lowers disposal costs, as less water and fecal material are sent to the landfill. A bypass is already installed and will be utilized manual bar screens.

PRIMARY TREATMENT

In this proposal we are suggesting to keep the aerations basin as is and transforming the existing clarifier into another aerations basin to accommodate for extra flow. Aeration provides oxygen to bacteria for treating and stabilizing the wastewater. Oxygen is needed by the bacteria to allow biodegradation to occur. The supplied oxygen is utilised by bacteria in the wastewater to break down the organic matter containing carbon to form carbon dioxide and water. As the bacteria break down the organic matter, It produces “sludge” which is then pumped to a sludge press and the excess water is moved back into the aerations basin for further processing.

SECONDARY TREATMENT

Due to the high nature of inflow the plant receives and it inability to process such water in high demand. We are suggesting introducing a Reverse Osmosis system that will collect any sludge that bypasses the aeration process during the high flow events. This system also acts as a clarifier removing the need for an extra retainage system. As wastewater flows from the aerations basins to the new Reverse Osmosis systems, it will be introduced to a membrane which only allows water molecules to flow through it entering into to the disinfection system.

ULTRAVIOLET DISINFECTION

Disinfection of the effluent will be provided as necessary to meet the Waste load Allocation appointed to this project by the Kentucky Division of Water. We are proposing to use the TrojanUV3000™PTP. The TrojanUV3000™PTP is ideally suited to treat flows up to 1.8 MGD. Designed

as a generic type of UV disinfection unit, the Trojan Package Treatment Plant (PTP) is very price competitive and offers an "off-the-shelf" solution for operators with limited budgets and limited treatment requirements. The system uses low-pressure, low-output lamps.

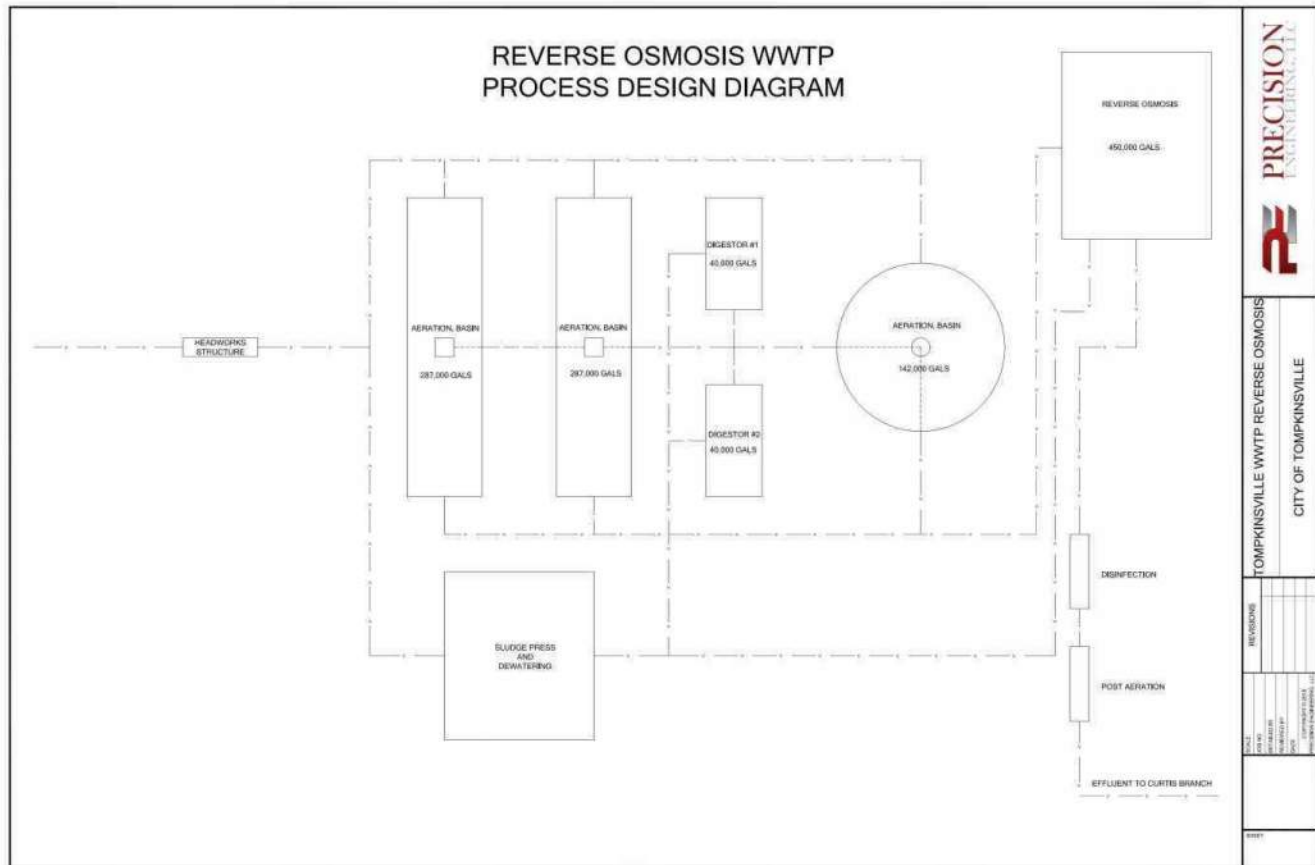
POST AERATION

An existing Post Aeration concrete basin is already installed at the plant site and will continue to be utilized. The existing air piping will be connected to the new energy efficient blowers which will be installed as part of this project. This system will provide assurance that a safe and habitable level of oxygen is available in the final effluent prior to discharging into Curtis Branch.

SLUDGE HANDLING

The City of Tompkinsville has an existing sludge belt press facility in very good condition. The belt press and facility were constructed in 2012 and will be more than sufficient to provide dewatering and sludge compaction for this proposed project.

TABLE 2		
TREATMENT ALT. A – REVERSE OSMOSIS PROCESS		
UNIT PROCESS		Tompkinsville WWTP
HEADWORKS		\$ 80,000.00
REVERSE OSMOSIS		\$ 3,500,000.00
SLIP-LINING		\$ 330,000.00
TELEMETRY		\$ 165,000.00
FORCE MAIN		\$ 348,000.00
JHC LIFT STATION		\$ 125,000.00
ULTRAVIOLET DISINFECTION		\$ 150,000.00
SSES		\$ 150,000.00
ENGINEERING/CONST. INSPECT/BID ADMIN & CONTINGENCIES		\$ 1,040,760.00
Estimated Construction Costs		\$ 5,888,760.00



**** Proposed process design schematic of Reverse Osmosis WWTP.

ALTERNATIVE TREATMENT PROCESS C: EXTENDED AERATION (NO ACTION)

INFLUENT SCREENING

As the influent waste water comes into the plant, it is first meet by a diversion box and at the end of this box is orifices that control the flow coming in. next the waste water comes to an old dilapidated auger captures all clumps of material and long stringy material. Next the rotating auger then conveys solids to the dumpster.

PRIMARY TREATMENT

After the influent screening the waste water is pumped to the aerations basins. Aeration provides oxygen to bacteria for treating and stabilizing the wastewater. Oxygen is needed by the bacteria to allow biodegradation to occur. The supplied oxygen is utilised by bacteria in the wastewater to break down the organic matter containing carbon to form carbon dioxide and water. As the bacteria

break down the organic matter, It produces “sludge” which is then pumped to a sludge press and the excess water is moved back into the aerations basin for further processing.

SECONDARY TREATMENT

After the waste water has surpassed the primary treatment, it is then moved to a clarifier where any floating sludge is scraped off the top and any sludge settling to the bottom is pumped to the sludge press. The “clean” water passes over weirs and moves toward the chlorine contact chamber.

CHLORINATION

Chlorine (Like peracetic acid) is an oxidizing agent. It oxidizes the outer cell membrane of bacterial cells by disrupting the function of the lipoprotein cytoplasmic membrane and the transport of electrons (i.e. the stronger the oxidizer, the faster the electrons are stripped from the microorganisms or die). Unlike peracetic acid, more chlorine is needed to disinfect the water.

POST AERATION

Once the water has made it to the chlorine contact chamber, “most” of all the sludge has been removed (except during high rain events). During this process water is in contact with the chlorine in a time frame depending upon the flows received that day.

SLUDGE HANDLING

The City of Tompkinsville has an existing sludge belt press facility in very good condition. The belt press and facility were constructed in 2012 and will be more than sufficient to provide dewatering and sludge compaction for this proposed project.

TABLE 3

Yearly Cost			
	No Action	SBR System	Reverse Osmosis
Const. Cost	\$ -	\$ 2,371,148.00	\$ 5,888,760.00
O&M Cost	\$ 354,533.00	\$ 279,341.93	\$ 425,439.60
Present Worth	\$ 5,050,103.00	\$ 6,297,727.83	\$ 8,204,147.25
20-year Present Worth	\$ 3,398,574.55	\$ 4,233,382.81	\$ 5,521,155.91
Salvage Value	\$ 2,287,143.24	\$ 2,844,138.78	\$ 3,715,579.65

There will be no initial additional cast by taking no action but there will be cost in terms of money and environmental impact. By taking no action and still using the extended aeration the plant still currently uses, the plant will still experience heavy peak flows. The plant will continue have to use its bypass system and continue to pollute Kentucky water ways. Each day the plant is ran with it inefficient system, the City will continue have to pay higher cost in electric bills.

Not only is the WWTP in great need of an upgrade, its sewer system as well is crumbling beneath the city. By taking away a package plant and adding them to the City's sewer system, we are allowing the opportunity to add new customers and cutting cost up to \$27,267.00/year for the Joe Harrison Carter Elementary School. Not taking any action to repair or replace it outdated piping, the I/I will continue to bombard the sewer plant with unneeded water and poison the soil with fecal matter and waste. Rectifying the sewer system will stop the NOV's given in the past few years and will allow the city to help the Kentucky water ways instead of damaging them.

Based upon the Alternatives given, the SBR system seems to be the best one based upon the effectiveness vs the monetary value. It solves the high volume of water during heavy storm events, it allows the city to save money on energy bills, it gives the City a plant that hasn't been upgraded in over 30 years, cuts back cost of operations and maintenance, plant will be easier to operate, and will allow the city to be in compliance with their KPDES permit. Because the city will save money by upgrading their sewer system, rates will not have to be increased.

IX. CROSS-CUTTER CORRESPONDENCE & MITIGATION

The following actions will be taken in response to the comments, recommendations, and/or requests made by the Cross Cutter Agencies. All Correspondences can be found in Appendix A.

KENTUCKY ECOLOGICAL SERVICES, FIELD OFFICE; Strict Erosion Control Measures and Best Management Practices requirements will be specified and required of any/all construction activities associated with the projects contained herein. According to the Kentucky Ecological Services Field Office there are no critical habitats lying within the planning area, however species of clams and mammals that are endangered or threatened that may appear in the planning area have been provided. In areas where bats and/or clams are known to occur, surveys will be conducted in order to avoid those areas if possible. Timing of construction will be done to result in the least possible impact on the bats and/or crayfish.

KENTUCKY DEPARTMENT OF FISH AND WILDLIFE RESOURCES; In regard to construction within the planning area KDFWR “does not anticipate impacts to federal or state-listed species”. However, in agreement with their proposed guidelines in order to minimize impacts to the aquatic environment their recommended erosion control measures of silt fences, staked straw bales, brush barriers, sediment basins or diversion ditches will be implemented dependent on the specific situation. Erosion control measures will be installed prior to construction and will be inspected and repaired regularly as needed.

KENTUCKY HERITAGE COUNCIL; The Council has recommended that the project will result in “no effect to historic properties”. We intend to contact the Kentucky Heritage Council should the boundaries or parameters of the project change. In the event of an unanticipated discovery of an archaeological site or object of antiquity the discovery will be reported to the Kentucky Heritage Council and to the Kentucky Office of State Archaeology in the Anthropology Department at the University of Kentucky. In the event that human remains be found all work will be immediately stopped and the area be cordoned off in accordance with KRS 72.020.

NRCS; As stated previously, to the maximum extent possible all lines will be constructed within existing road right of way, and in previously disturbed areas. However, NRCS will be requested to provide input on any projects proposed. NRCS consider the planning area to be non-farmland and thus not impacting additional prime farmland or statewide important farmland.

USACE DEPARTMENT OF THE ARMY; As stated previously all aspects of this project will attempt to provide no impact of waters of the US. USACE will be contacted throughout the design for their guidance and recommendations to discuss aquatic resource impact avoidance and minimalization. This clarification of the Average Daily Flow to 0.80 MGD from the previously stated flow will have no impact on the portions of the project within the USACE's jurisdiction. These portions are only located at a creek/stream crossings proposed for the sewer line extension.

X. EVALUATION & IMPLEMENTATION OF RECOMMENDED REGIONAL FACILITIES PLAN

In summary, the City of Tompkinsville will greatly benefit from this project in terms of Monetary reasons by saving from electric cost and by eliminating their need for chemicals. They will have and plant the can nearly operate on its own and will remove any errors that can be caused by operators mistakes. The outstanding NOV's issued over the past years will come to a standstill and Kentucky streams will be able to flow clean again. The surrounding communities will have built faith in their small town, hopefully fueling their want to be part of the sewer collection system. By undertaking this project, as said before, the environment will be the most heavily impacted since we are fixing I/I issues along with a bypass. This will help restore the Kentucky Waterways.

The Current plan to pay for this project is to apply for funding and to cut back operations and maintenance of the wastewater collection system. The user rates have changed over the years, but all rates apply to everyone who utilizes the sewer system whether, in or out of city limits or commercial, industrial or residential. No rate adjustments are anticipated by the completion of this project. The old 2017 user rates are as follows

- | | |
|------------------------------------|--|
| A. The first 1.000 gallons: | \$19.00 flat rate |
| B. 1,001 gallons to 3,000 gallons: | \$4.90 per additional thousand gallons |
| C. 3,001 gallons to 5,000 gallons: | \$4.75 per additional thousand gallons |
| D. 5,001 gallons to 8,000 gallons: | \$4.50 per additional thousand gallons |
| E. Over 8,000 gallons: | \$4.40 per additional thousand gallons |

In terms of 4,000 gallons the cost would be \$33.55. The Current user rates for 2018 are as follows:

- | | |
|------------------------------------|---------------------------------------|
| A. The first 1.000 gallons: | \$19.00 flat rate |
| B. 1,001 gallons to 3,000 gallons: | \$.490 per additional hundred gallons |
| C. 3,001 gallons to 5,000 gallons: | \$.475 per additional hundred gallons |
| D. 5,001 gallons to 8,000 gallons: | \$.450 per additional hundred gallons |
| E. Over 8,000 gallons: | \$.440 per additional hundred gallons |

In terms of 4,000 gallons the cost would be \$33.55.

IMPLEMENTATION SCHEDULE

Planning Period	Infrastructure Projects
0-2 Years	WWTP & Associated Collection Systems
2-5 Years	Collection System Extensions

The detailed implementation schedule anticipated is contained herein.

0 to 2-Year Project(s)

1. Tompkinsville WWTP – This project will include the construction / retrofitting of the existing 0.67 MGD to a 0.80 MGD treatment facility with a design hourly peak flow of 1.27 MGD. This plant is located in the western portion of the City of Tompkinsville as fully described herein to utilize an SBR system. This new system will come with brand new headworks, repaired/replaced sewer lines, upgraded/replaced pump stations, new disinfection system, retrofitting Clarifier to EQ Basin and Aeration Basins to SBR Basins.
2. This new system will come with brand new headworks, repaired/replaced sewer lines, upgraded/replaced pump stations, new disinfection system, retrofitting Clarifier to EQ Basin and Aeration Basins to SBR Basins. This will allow the WWTP to handle the peak flow demands which will increase due to the repaired lines.
3. Extension of the Force Main approximately 2 miles north along KY 163 ending at the Joe Harrison Carter Elementary and new services along this line will then be implemented.
4. Expand the Planning Area to include Joe Harrison Carter Elementary School

Future Projects

1. 2 to 5 Year Projects

During this time period it is projected that new industries will come to Tompkinsville. We hope to bring them service with new gravity and force main lines.

2. 3 to 20 Year Projects

Within this time period is anticipated that newly constructed residential and commercial uses will be established along the newly installed force main and adjacent to the city limits of Tompkinsville which will then be able to receive sanitary sewer services due to the repair of the existing infrastructure.

3. Beyond 20 Years

With hopeful future growth it is anticipated that additional extension of sewer service and infrastructure will be warranted. As development continues it is probable that individual septic systems will become less and less prevalent as homeowners and especially commercial/industrial developers will have a desire to connect to public sewer.

APPENDIX A

CROSS CUTTER CORRESPONDENCE

Thom Kendall

From: Jacobs, Steve - NRCS, Maysville, KY <steve.jacobs@ky.usda.gov>
Sent: Tuesday, March 14, 2017 1:52 PM
To: Thom Kendall
Subject: RE: Tompkinsville KY WWTP



Thom Kendall
Estimator / Inspector
2006 Edmonton Road
Tompkinsville, KY 42167
Office: 270.407.5784
www.precision-engr.com

Thom Kendall

From: Thom Kendall <thom@precision-engr.com>
Sent: Tuesday, March 14, 2017 2:26 PM
To: 'steve.jacobs@ky.usda.gov'
Subject: Tompkinsville KY WWTP
Attachments: NRCS.pdf

Mr. Jacobs:

I've attached Precision's submittal packet for the Tompkinsville WWTP improvements cross cutter correspondence solicitation. If you have any questions or have trouble opening the attached files please let me know.

Thank you,



Thom Kendall
Estimator / Inspector
2006 Edmonton Road
Tompkinsville, KY 42167
Office: 270.407.5784
www.precision-engr.com



PRECISION
ENGINEERING, LLC

2006 Edmonton Road • Tompkinsville, KY 42167 • Phone (270) 407-5784 • Fax (270) 487-8029

March 14, 2017

Steve Jacobs
NRCS – United States Dept. of Agriculture
1925 Old Main Street, Suite 2
Maysville, KY 41056

RE: City of Tompkinsville Regional Facility Plan

Dear Mr. Jacobs:

The City of Tompkinsville Kentucky is amending their existing 201 Facility Plan. The amended facilities plan includes an upgrade to an existing waste water treatment plant, repair/replacement of approximately six thousand (6,000 LF) linear feet of existing sewer pipe and adding approximately two (2) miles of sewer force main to accommodate an existing Elementary School north of the city limits. In the process an existing private waste water treatment plant servicing the school will be removed.

The information included contains a project description, existing and proposed site layout for the waste water treatment plant along with a location map for the sewer extension, WWTP location and sewer line rehabilitation/replacement area.

Please provide comment on the environmental impact these projects may have on threatened or endangered species and their habitats. If you have any questions while reviewing the information, please contact me at the number listed above or you can e-mail me at thom@precision-engr.com

Sincerely,
PRECISION ENGINEERING, LLC

Thom Kendall

Thom Kendall



Project Description:

Due to local needs and maintenance reasons further discussed in this plan, the City is proposing to update the WWTP (WWTP), replace and/or repair 6000 feet of the City's sewer pipes, and add 2 miles of force main to accommodate Joe Harrison Carter Elementary. The construction of these new facilities will alleviate a portion of the existing WWTP's flow, the City plans to expand its collection system to include service to approximately 20 new residential & commercial customers, and develop a force main that will eventually close the Joe Harrison Carter Elementary package plant and route the flow to the updated WWTP. Due to the City's needs and development aspirations, this document is not intended to replace the current Regional Facilities Plan but to amend and update it. The main differences in the Plan submitted in year 2000 and this one, is the proposed construction of an updated WWTP. The existing plant is in good condition but experiences large amounts of I/I at times. The construction of the updated plant will allow the plant to accrue a higher peak flow and treat a higher average flow. Various replacement projects are also included and will serve as the City's effort to eliminate the I/I issues throughout the system.

As indicated on the attached drawings the existing treatment capacity of the waste water treatment plant is 670,000 gallons per day with an average daily flow of 350,000 gallons per day. The proposed upgrades to the waste water treatment plant would increase the capacity to 1.02 million gallons per day and the average daily flow to 510,000 gallons per day. Repair and/or replacement of the 6,000 LF of sewer line will decrease ground infiltration while removing the private WWTP utilized by the school should have a positive impact on their aging system while reducing ground water impacts.

The accompanying map (Sewer System Map) shows the project in its entirety. Green lines on the drawing represent existing sewer lines, green lines with red hatching overlaid on them represent the 6,000 LF of sewer lines to be replaced/repared. The red line leading north out of the city limits is the proposed 4" force main. The existing waste water treatment plant is shown on the map; the proposed changes to the plant are to take place in the same location.



EXISTING TOMPKINSVILLE WWTP
 TREATMENT CAPACITY = 670,000 GPD
 AVERAGE DAILY FLOW = 580,000 GPD
 PEAK DAILY FLOW = 1.2 MGD



SCALE	1" = 20'
JOB NO.	
DESIGNED BY	JS
REVIEWED BY	SPH
DATE	10-21-2016

REVISIONS	

TOMPKINSVILLE WWTP SBR CONVERSION
 & SANITARY SEWER IMPROVEMENTS

EXISTING WWTP LAYOUT



PRECISION
 ENGINEERING, LLC



PROPOSED TOMPKINSVILLE SBR WWTP
TREATMENT CAPACITY = 1.02 MGD
AVERAGE DAILY FLOW = 510,000 GPD
PEAK HYDRAULIC FLOW = 1,180 MGD

POST-GRAB BASIN
2ND GRAB CHAMBER

NEW PUMP ROOMS
1ST & 2ND

POST EO BASIN

SLUDGE DRYING BED
NOT IN USE

SLUDGE DRYING BED
NOT IN USE

SLUDGE
PRESS & BUILDING

SBR
BASIN #2

SBR
BASIN #1

LAB &
CONTROL
BUILDING

POST-GRAB

POST-GRAB



TOMPKINSVILLE WWTP SBR CONVERSION
& SANITARY SEWER IMPROVEMENTS
PROPOSED SBR WWTP



PRECISION
ENGINEERING, LLC

REVISIONS	
SCALE	1" = 20'
JOB NO.	
DESIGNED BY	J.S.
REVIEWED BY	SPH
DATE	10-21-2018



DESIGNED BY	JR	REV. NO.	DESCRIPTION	DATE
CHECKED BY	BRH	1		
DATE	12.16.16	2		
SCALE	1	3		

CITY OF TOMPKINSVILLE
SEWER SYSTEM MAP

Thom Kendall

From: Jacobs, Steve - NRCS, Maysville, KY <steve.jacobs@ky.usda.gov>
Sent: Wednesday, March 15, 2017 8:30 AM
To: Thom Kendall
Cc: Finkbeiner, Billy - NRCS, Elizabethtown, KY; Gehring, David - NRCS, Owensboro, KY
Subject: City of Tompkinsville Regional Facility Plan - Precision Eng.
Attachments: Precision_Eng_Tompkinsville_Regional_Facility_3-15-2017.pdf

As requested.

Steve E. Jacobs

Area 3 Resource Soil Scientist
Maysville, KY 41056
Phone : 606-759-5570, ext 201
e-mail: steve.jacobs@ky.usda.gov

This electronic message contains information generated by the USDA solely for the intended recipients. Any unauthorized interception of this message or the use or disclosure of the information it contains may violate the law and subject the violator to civil or criminal penalties. If you believe you have received this message in error, please notify the sender and delete the email immediately.



United States Department of Agriculture

To: Thom Kendall
Precision Engineering, LLC
2006 Edmonton road
Tompkinsville, KY 42167

March 15, 2017

Re: City of Tompkinsville Regional Facility Plan

Mr. Kendall,

NRCS does not officially do environmental assessments for these types of projects, but rather provides information on the soils and/or impact to farmland according to the criteria set forth in 1985 National Food Security Act Manual.

The planned upgrade to the existing treatment plant and the repair/replacement of 6,000 LF of existing sewer pipe are, according to the information in your request, on lands that have been previously disturbed or developed within the boundaries of the existing treatment plant or the City of Tompkinsville, KY. The additional 2 miles of sewer force main to the Elementary School, according to your included map, is planned to be placed within the right-of-way of KY Highway 163. All these areas are considered non-farmland and are not impacting additional prime farmland or statewide important farmland.

Additional information about the soils of Monroe County, KY if needed is available on-line at USDA's Web Soil Survey for Monroe County, KY.

If this office may be of additional assistance, please do not hesitate to contact my office in Maysville KY at 606-759-5570 or contact the NRCS office in Elizabethtown at 270-765-2702.

.

Steve Jacobs
Area 3 Resource Soil Scientist, NRCS, Maysville, KY.
e-mail: steve.jacobs@ky.usda.gov

cc: Billy Finkbeiner, Supervisory Natural Resource Manager, Elizabethtown, KY
David Gehring, Area 2 Resource Soil Scientist, Owensboro, KY

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Thom Kendall

From: Thom Kendall <thom@precision-engr.com>
Sent: Thursday, March 16, 2017 12:58 PM
To: 'Knuckles, Meagan C CIV CELRL CELRD (US)'
Subject: RE: [EXTERNAL] Tompkinsville KY WWTP (UNCLASSIFIED)

Thank you.

-----Original Message-----

From: Knuckles, Meagan C CIV CELRL CELRD (US) [mailto:Meagan.C.Knuckles@usace.army.mil]
Sent: Thursday, March 16, 2017 11:57 AM
To: Thom Kendall <thom@precision-engr.com>
Subject: RE: [EXTERNAL] Tompkinsville KY WWTP (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Thom,

If you have any general questions about the project, you can give me a call. But if you need an official response/reply for your records, you would need to submit a request to my supervisor. His contact information is below:

Mr. David Baldridge
Chief, South Branch
Regulatory Division
U.S. Army Corps of Engineers, Louisville District CELRL-RDS, Room 752 Louisville, Kentucky 40201

David.E.Baldridge@usace.army.mil
502-315-6675

Thanks,

Meagan Knuckles
Project Manager, South Branch
Regulatory Division
U.S. Army Corps of Engineers, Louisville District
Phone: 502-315-6709
Fax: 502-315-6677

Mailing Address:

U.S. Army Corps of Engineers
Louisville District
CELRL-RDS, Room 752
P.O. Box 59
Louisville, KY 40201
or
600 Dr. M. L. King Jr. Place
Louisville, KY 40202

Thom Kendall

From: Thom Kendall <thom@precision-engr.com>
Sent: Thursday, March 16, 2017 12:58 PM
To: 'Knuckles, Meagan C CIV CELRL CELRD (US)'
Subject: RE: [EXTERNAL] Tompkinsville KY WWTP (UNCLASSIFIED)

Thank you.

-----Original Message-----

From: Knuckles, Meagan C CIV CELRL CELRD (US) [mailto:Meagan.C.Knuckles@usace.army.mil]
Sent: Thursday, March 16, 2017 11:57 AM
To: Thom Kendall <thom@precision-engr.com>
Subject: RE: [EXTERNAL] Tompkinsville KY WWTP (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Thom,

If you have any general questions about the project, you can give me a call. But if you need an official response/reply for your records, you would need to submit a request to my supervisor. His contact information is below:

Mr. David Baldrige
Chief, South Branch
Regulatory Division
U.S. Army Corps of Engineers, Louisville District CELRL-RDS, Room 752 Louisville, Kentucky 40201

David.E.Baldrige@usace.army.mil
502-315-6675

Thanks,

Meagan Knuckles
Project Manager, South Branch
Regulatory Division
U.S. Army Corps of Engineers, Louisville District
Phone: 502-315-6709
Fax: 502-315-6677

Mailing Address:

U.S. Army Corps of Engineers
Louisville District
CELRL-RDS, Room 752
P.O. Box 59
Louisville, KY 40201
or
600 Dr. M. L. King Jr. Place
Louisville, KY 40202

-----Original Message-----

From: Thom Kendall [mailto:thom@precision-engr.com]

Sent: Tuesday, March 14, 2017 11:06 AM

To: Knuckles, Meagan C CIV CELRL CELRD (US) <Meagan.C.Knuckles@usace.army.mil>

Subject: [EXTERNAL] Tompkinsville KY WWTP

Ms. Knuckles:

Precision is the engineer for the proposed Tompkinsville KY waste water treatment plant project which involves a new WWTP, repairing existing dilapidated sewer lines and extending the existing system to include an elementary school north of the city limits.

In order to comply with 401 KAR 5:006 ("Cross Cutter Correspondence & Mitigation") I must receive guidance from a specific list of agencies, USACE being one of them.

Would you be my contact for this project or could you direct me to whom I should get in touch with?

Thank you,

Thom Kendall

Estimator / Inspector

2006 Edmonton Road

Tompkinsville, KY 42167

Office: 270.407.5784

Blockedwww.precision-engr.com

CLASSIFICATION: UNCLASSIFIED



PRECISION
ENGINEERING, LLC

2006 Edmonton Road • Tompkinsville, KY 42167 • Phone (270) 407-5784 • Fax (270) 487-8029

March 16, 2017

Mr. David Baldridge
Chief, South Branch
Regulatory Division
U.S. Army Corps of Engineers, Louisville District CELRL-RDS
Room 752
Louisville, KY 40201

RE: City of Tompkinsville Regional Facility Plan

Dear Mr. Baldridge:

The City of Tompkinsville Kentucky is amending their existing 201 Facility Plan. The amended facilities plan includes an upgrade to an existing waste water treatment plant, repair/replacement of approximately six thousand (6,000 LF) linear feet of existing sewer pipe and adding approximately two (2) miles of sewer force main to accommodate an existing Elementary School north of the city limits. In the process an existing private waste water treatment plant servicing the school will be removed.

The information included contains a project description, existing and proposed site layout for the waste water treatment plant along with a location map for the sewer extension, WWTP location and sewer line rehabilitation/replacement area.

Please provide comment on the environmental impact these projects may have on threatened or endangered species and their habitats. If you have any questions while reviewing the information, please contact me at the number listed above or you can e-mail me at thom@precision-engr.com

Sincerely,
PRECISION ENGINEERING, LLC

Thom Kendall

Thom Kendall



Project Description:

Due to local needs and maintenance reasons the City of Tompkinsville is proposing to update the Waste Water Treatment Plant (WWTP), replace and/or repair 6000 feet of the City's sewer pipes, and add 2 miles of force main to accommodate Joe Harrison Carter Elementary. The construction of these new facilities will alleviate a portion of the existing WWTP's flow, the City plans to expand its collection system to include service to approximately 20 new residential & commercial customers, and develop a force main that will eventually close the Joe Harrison Carter Elementary package plant and route the flow to the updated WWTP. Due to the City's needs and development aspirations, this document is not intended to replace the current Regional Facilities Plan but to amend and update it. The main differences in the Plan submitted in year 2000 and this one, is the proposed construction of an updated WWTP. The existing plant is in good condition but experiences large amounts of I/I at times. The construction of the updated plant will allow the plant to accrue a higher peak flow and treat a higher average flow. Various replacement projects are also included and will serve as the City's effort to eliminate the I/I issues throughout the system.

As indicated on the attached drawings the existing treatment capacity of the waste water treatment plant is 670,000 gallons per day with an average daily flow of 350,000 gallons per day. The proposed upgrades to the waste water treatment plant would increase the capacity to 1.02 million gallons per day and the average daily flow to 510,000 gallons per day. Repair and/or replacement of the 6,000 LF of sewer line will decrease ground infiltration while removing the private WWTP utilized by the school should have a positive impact on their aging system while reducing ground water impacts.

The accompanying map (Sewer System Map) shows the project in its entirety. Green lines on the drawing represent existing sewer lines, green lines with red hatching overlaid on them represent the 6,000 LF of sewer lines to be replaced/repared. The red line leading north out of the city limits is the proposed 4" force main. The existing waste water treatment plant is shown on the map; the proposed changes to the plant are to take place in the same location.



PROPOSED TOMPKINSVILLE SBR WWTP
 TREATMENT CAPACITY = 1.102 MGD
 AVERAGE DAILY FLOW = 510,000 GPD
 PEAK HYDRAULIC FLOW = 1,109 MGD



**TOMPKINSVILLE WWTP SBR CONVERSION
 & SANITARY SEWER IMPROVEMENTS**

PROPOSED SBR WWTP



PRECISION
 ENGINEERING, LLC

REVISIONS

NO.	DATE	DESCRIPTION
1	10-21-2016	ISSUED FOR PERMIT

SCALE	1" = 20'
DRAWN BY	JS
CHECKED BY	SRH
DATE	10-21-2016



DATE	11/16/16	2
SCALE		3

CITY OF TOMPKINSVILLE
SEWER SYSTEM MAP





DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
P.O. BOX 59
LOUISVILLE KY 40201-0059
FAX: (502) 315-6677
<http://www.lrl.usace.army.mil/>

March 30, 2017

Regulatory Division
South Branch
ID No. LRL-2017-271-cat

Mr. Thom Kendall
Precision Engineering, LLC
2006 Edmonton Road
Tompkinsville, Kentucky 42167

Dear Mr. Kendall:

This is in response to your letter dated March 21, 2017, which requested review by our office of a proposal to upgrade an existing waste water treatment plant, repair/replace approximately 6,000 linear feet of existing sewer pipe, construct approximately 2 miles for sewer force main, and remove the existing private waste water treatment plant servicing Joe Harrison Carter Elementary School in Monroe County, Kentucky near the city of Tompkinsville. Specifically, you requested that we respond with any environmental concerns we may have regarding the aforementioned proposal.

The U.S. Army Corps of Engineers (USACE) exercises regulatory authority under Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. § 403) and Section 404 of the Clean Water Act (33 U.S.C. § 1344) for certain activities in "waters of the United States (U.S.)". These waters include all waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce.

"Waters of the U.S." include hydrologically connected lakes, rivers, and stream channels (perennial, intermittent, ephemeral) exhibiting an Ordinary High Water Mark (OHWM), wetlands, sloughs, wet meadows and wetlands adjacent to "waters of the U.S." The OHWM elevation is the line on the bank established by the changing water surface and is indicated by physical characteristics such as a clear natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; and other indications as determined upon inspection of the area.

If the project would necessitate the discharge of dredged or fill material into any "waters of the U.S." or if it would impact any navigable "waters of the U.S.", you should submit a Department of the Army (DA) permit application for review by this office.

Our lack of comments on specific potential environmental impacts should not be construed as concurrence that no significant environmental damage would result from the project. Our comments on this project are limited to only those effects which may fall within our area of jurisdiction and thus does not obviate the need to obtain other permits from State or local agencies.

Further information on the Regulatory Program, including the DA permit application, can be obtained from our website located at: <http://www.lrl.usace.army.mil/Missions/Regulatory.aspx>. If your project would necessitate the discharge of dredged or fill material into "waters of the U.S.", please allow sufficient time in your preconstruction schedule for the processing of a DA permit application.

If you have any questions concerning this matter, please contact this office at the above address, ATTN: CELRL-RDS or call Mr. Cody Thayer at (502)315-6690. All correspondence pertaining to this matter should refer to our ID No. LRL-2017-271-cat.

Sincerely,

A handwritten signature in blue ink, appearing to read "David Baldrige", is written over the typed name.

David Baldrige
Chief, South Branch
Regulatory Division

Appendix 1 - REQUEST FOR CORPS JURISDICTIONAL DETERMINATION (JD)

To: District Name Here

- I am requesting a JD on property located at: 206 N. Magnolia St.
(Street Address)
City/Township/Parish: Tompkinsville County: Monroe State: KY
Acreage of Parcel/Review Area for JD: 500 +/-
Section: _____ Township: _____ Range: _____
Latitude (decimal degrees): 36.700383 Longitude (decimal degrees): -85.706053
(For linear projects, please include the center point of the proposed alignment.)
- Please attach a survey/plat map and vicinity map identifying location and review area for the JD.
- ☐ I currently own this property. ☐ I plan to purchase this property.
☒ I am an agent/consultant acting on behalf of the requestor.
☐ Other (please explain): _____.
- Reason for request: (check as many as applicable)
☐ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all aquatic resources.
☐ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all jurisdictional aquatic resources under Corps authority.
☒ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps, and the JD would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process.
☐ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps; this request is accompanied by my permit application and the JD is to be used in the permitting process.
☐ I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is included on the district Section 10 list and/or is subject to the ebb and flow of the tide.
☐ A Corps JD is required in order to obtain my local/state authorization.
☐ I intend to contest jurisdiction over a particular aquatic resource and request the Corps confirm that jurisdiction does/does not exist over the aquatic resource on the parcel.
☐ I believe that the site may be comprised entirely of dry land.
☐ Other: _____
- Type of determination being requested:
☐ I am requesting an approved JD.
☐ I am requesting a preliminary JD.
☐ I am requesting a "no permit required" letter as I believe my proposed activity is not regulated.
☐ I am unclear as to which JD I would like to request and require additional information to inform my decision.

By signing below, you are indicating that you have the authority, or are acting as the duly authorized agent of a person or entity with such authority, to and do hereby grant Corps personnel right of entry to legally access the site if needed to perform the JD. Your signature shall be an affirmation that you possess the requisite property rights to request a JD on the subject property.

*Signature: Thom Kendall Date: 2/19/18

- Typed or printed name: Thom Kendall
Company name: Precision Engineering, LLC
Address: P.O. Box 2
Tompkinsville, KY 42167
Daytime phone no.: 270-407-5784
Email address: thom@precision-engr.com

***Authorities:** Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.

Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.

Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.

Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an AJD cannot be evaluated nor can an AJD be issued.

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Precision Engineering, LLC: Thom Kendall		File Number: LRL-2017-271	Date: 02/26/2018
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A	
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B	
	PERMIT DENIAL	C	
	APPROVED JURISDICTIONAL DETERMINATION	D	
X	PRELIMINARY JURISDICTIONAL DETERMINATION	E	

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

Thom Kendall

From: Baldrige, David E CIV USARMY CELRL (US) <David.E.Baldrige@usace.army.mil>
Sent: Thursday, February 15, 2018 11:35 AM
To: Thom Kendall
Cc: Thayer, Cody A CIV USARMY CELRL (US)
Subject: RE: [Non-DoD Source] LRL-2017-271-cat

Mr. Kendall,

We reviewed the project based on the information provided which didn't indicate whether jurisdictional waters would or would not be impacted. Our letter stated that a DA permit will be required IF waters are impacted. Since you are replacing 6000 feet of city sewer pipes and adding 2 miles of force main it is highly likely that you will have to cross at least a few streams and/or wetlands. If that is the case a permit will be required. Typically to get this process going, the project proponent will enlist the help of an environmental consultant to delineate any waters that may be impacted. They will then apply for any necessary permits.

I have copied Cody Thayer of my staff on this email since he was assigned your project initially. His phone number is 502-315-6690. If you have any questions you can call either of us.

Thanks,

David Baldrige
Chief, South Branch
Regulatory Division
Louisville District
U.S. Army Corps of Engineers
600 Dr. Martin Luther King Jr. Pl.
Louisville, KY 40201
502-315-6675

-----Original Message-----

From: Thom Kendall [mailto:thom@precision-engr.com]
Sent: Thursday, February 15, 2018 11:46 AM
To: Baldrige, David E CIV USARMY CELRL (US) <David.E.Baldrige@usace.army.mil>
Subject: [Non-DoD Source] LRL-2017-271-cat

Mr. Baldrige:

Last year you responded to a cross cutter correspondence request I had sent you with the above attached letter. I recently received a review of our proposed facilities plan with the attached "review" letter in regard to the cross cutters.

It's my understanding that, according to your letter, if this project does necessitate the discharge of dredged or fill material into any waters of the US a DA permit is not required. I don't believe our proposed project will do so.

The review letter says that the State requires a determination of "no impacts" from the USACE. What protocol do I need to follow in order to obtain this?

Thank you,

Thom Kendall

Estimator / Inspector

PO Box #2

Tompkinsville, KY 42167

Office: 270.407.5784

Blockedwww.precision-engr.com



DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
P.O. BOX 59
LOUISVILLE KY 40201-0059

REPLY TO
ATTENTION OF:

February 27, 2018

Regulatory Division
South Branch
ID No. LRL-2017-271

Mr. Thom Kendall
Precision Engineering, LLC
2006 Edmonton Road
Tompkinsville, Kentucky 42167

Dear Mr. Kendall,

This letter is in regard to a preliminary jurisdictional determination request for a proposed project to install/repair/replace 6,000 linear feet of sewer pipe, 2 miles of sewer force main, and upgrade a wastewater treatment plant in Monroe County, Kentucky (36.746379° N, 85.690416° W).

The site was reviewed pursuant to Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act of 1899. Section 404 of the CWA requires that a Department of the Army (DA) permit be obtained for the placement or discharge of dredged and/or fill material into "waters of the United States (U.S.)," including wetlands, prior to conducting the work (33 U.S.C. 1344). Section 10 of the Rivers and Harbors Act of 1899 requires that a DA Permit be obtained for structures or work in or affecting navigable "waters of the U.S.," prior to conducting the work (33 U.S.C. 403).

Based on the information provided to this office, the site contains streams that may be considered jurisdictional "waters of the U.S.," in accordance with the Regulatory Guidance Letter for Jurisdictional Determinations issued by the U.S. Army Corps of Engineers on October 31, 2016 (RGL No. 16-01).

As indicated in the guidance, this Preliminary Jurisdictional Determination is non-binding and cannot be appealed and only provides a written indication that "waters of the U.S.," including wetlands, may be present on-site. For purposes of computation of impacts, compensatory mitigation requirements, and other resource protection measures, a permit decision made on the basis of a Preliminary Jurisdictional Determination will treat all waters and wetlands on the site as if they are jurisdictional "waters of the U.S."

Enclosed with this letter are a preliminary jurisdictional determination (JD), a Notification of Appeal Process (NAP) fact sheet, and Request for Appeal (RFA) form. However, a preliminary JD is not appealable and impacting "waters of the U.S." identified in the preliminary JD will result in you waiving the right to request an approved JD at a later date. An approved JD may be

requested (which may be appealed), by contacting me for further instruction.

Should your project proposal include the placement or discharge of dredged and/or fill material into any "waters of the U.S.," a DA Permit application must be submitted. Along with the DA permit application, we will need additional details regarding the project's design, scope, photos, construction methods, purpose, maps, and all impacts to "waters" (linear feet, width and acreage), as well as any coordination or documentation with the United States Fish and Wildlife Service and the State Historic Preservation Officer (if possible). You are reminded that all drawings must be submitted on 8 ½ x 11-inch paper and be of reproducible quality.

Further information on the Regulatory Program, including the DA Permit application, can be obtained from our website located at: <http://www.lrl.usace.army.ml/Missions/Regulatory.aspx> Please allow sufficient time in your preconstruction schedule for the processing of a DA permit application.

If you have any questions, please contact this office by writing to the above address, ATTN: CELRL-RDS or by calling me at 502-315-6690. Any correspondence on this matter should refer to our ID No. LRL-2017-271-cat.

Sincerely,



Cody Thayer
Project Manager
South Branch

Enclosures

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: February 26, 2018

B. NAME AND ADDRESS OF PERSON REQUESTING PJD:

Mr. Thom Kendall
Precision Engineering, LLC
2006 Edmonton Road
Tompkinsville, Kentucky 42167

C. DISTRICT OFFICE, FILE NAME, AND NUMBER: Louisville District, City of Tompkinsville
Regional Facility Plan, LRL-2017-271

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:
(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

State: Kentucky County/parish/borough: Monroe City: Tompkinsville

Center coordinates of site (lat/long in degree decimal format):

Lat.: 36.746379° N Long.: 85.690416° W

Universal Transverse Mercator:

Name of nearest waterbody: East Fork Barren River

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☒ Office (Desk) Determination. Date: February 26, 2018

☒ Field Determination. Date(s): February 22, 2018

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

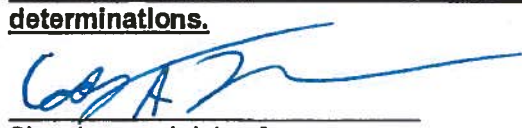
Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
East Fork Barren River	36.74640	-85.69033	100 Linear Feet	Non-Wetland Perennial	Section 404
Stream 1	36.73845	-85.68852	100 Linear Feet	Non-Wetland Intermittent	Section 404
Stream 2	36.73489	-85.68752	100 Linear Feet	Non-Wetland Ephemeral	Section 404

SUPPORTING DATA. Data reviewed for PJD (check all that apply)

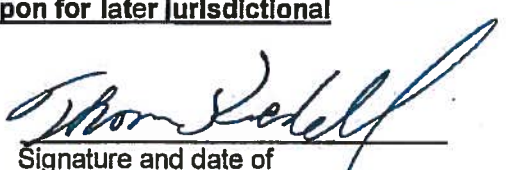
Checked Items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

- ☒ Maps, plans, plots or plat submitted by or on behalf of the PJD requestor: Map:
Environmental Review Package – Mr. Thom Kendall – Precision Engineering,
LLC – Dated: March 21, 2017
- ☐ Data sheets prepared/submitted by or on behalf of the PJD requestor.
☐ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report. Rationale: _____.
- ☐ Data sheets prepared by the Corps: _____.
- ☐ Corps navigable waters' study: _____.
- ☐ U.S. Geological Survey Hydrologic Atlas: _____.
☐ USGS NHD data.
☐ USGS 8 and 12 digit HUC maps.
- ☒ U.S. Geological Survey map(s). Cite scale & quad name: 1:24,000 - Tompkinsville,
KY
- ☒ Natural Resources Conservation Service Soil Survey. Citation: SSURGO Database
for Monroe Co, KY (2018).
- ☐ National wetlands inventory map(s). Cite name: _____.
- ☒ State/local wetland inventory map(s): _____.
- ☐ FEMA/FIRM maps:
- ☐ 100-year Floodplain Elevation is: _____.
- ☒ Photographs: ☒ Aerial (Name & Date): Digital Globe Imagery provided by ESRI (2018).
or ☒ Other (Name & Date): Google Earth (2018)
- ☐ Previous determination(s). File no. and date of response letter: _____.
- ☐ Other information (please specify): _____.

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.



Signature and date of
Regulatory staff member
completing PJD



Signature and date of
person requesting PJD
(REQUIRED, unless obtaining
the signature is impracticable)

¹ Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.

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City of Tompkinsville

City Clerk

Ashley Pennington

•

Attorney

Richard D. Jackson

Scotty D. Turner, Mayor

206 N Magnolia Street

Tompkinsville, KY 42167

Phone (270-487-6776)

TTY (Hearing or Speech Disabled) 800-648-6056

Commissioners

Anita Bartlett

Bobby Adams

Tenna Cain

Tony Bartley

Date: February 23, 2018

Russell S. Neal, Environmental Control Supervisor
Department for Environmental Protection
Kentucky Division of Water
300 Sower Blvd 3rd Floor
Frankfort, KY 40601

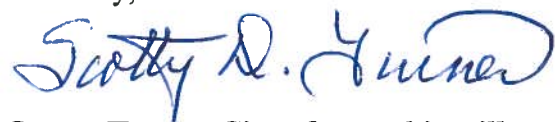
RE: Commitment Letter – Tompkinsville WWTP Project

Dear Mr. Neal:

The City of Tompkinsville appreciates your assistance as we endeavor to update and improve our existing waste water system throughout portions of the City. During this process the system is committed to following the environmental mitigation requirements called for by any applicable agency having jurisdiction in our community, especially those contacted during the preliminary cross-cutter correspondence portion of the update of Tompkinsville's Facilities Plan. We are fully vested in producing a finished product that will enhance the lives of our citizens while diligently attempting to work within the confines and guidelines of all interested parties.

Feel free to contact me with any concerns you may have regarding this project. I, or my representatives, will be more than happy to expedite this process in any way possible.

Sincerely,



Scotty Turner, City of Tompkinsville Mayor

Received
August 29, 2017
SWPB



P.O. Box 2 • Tompkinsville, KY 42167 • Phone (270) 407-5784 • Fax (270) 487-8029

Date: August 29, 2017

Division of Water
Energy and Environment Cabinet
c/o Courtney Seitz
300 Sower Blvd.
3rd Floor
Frankfort, KY 40601

RE: Waste Load Allocation Request - Tompkinsville KY Wastewater System & Treatment Plant Renovation

Dear Mr. Seitz:

Per our conversation on August 11th, I am formally requesting the determined waste load allocation for the Tompkinsville sewer system and WWTP renovation / upgrade project.

This project will result in the construction of a retrofit 1.7 MGD SBR WWTP of the existing Tompkinsville Extended Aeration WWTP (1.2 MGD) and will reduce power consumption costs by roughly 50%. Approximately 5,500 LF of sanitary sewer mains will be rehabilitated to eliminate problematic and severe infiltration and inflow. A new force main (approximately 2 miles) will be extended to the Joe Harrison Carter Elementary and a new lift station installed to eliminate the existing and cumbersome JHC Package Treatment Plant. A new SCADA system will be installed throughout the system and will allow proper monitoring and control of the new SBR WWTP and all ten (10) lift stations within the City's system. Variable Frequency Drives (VFDs) will be installed on all lift stations to reduce power consumption.

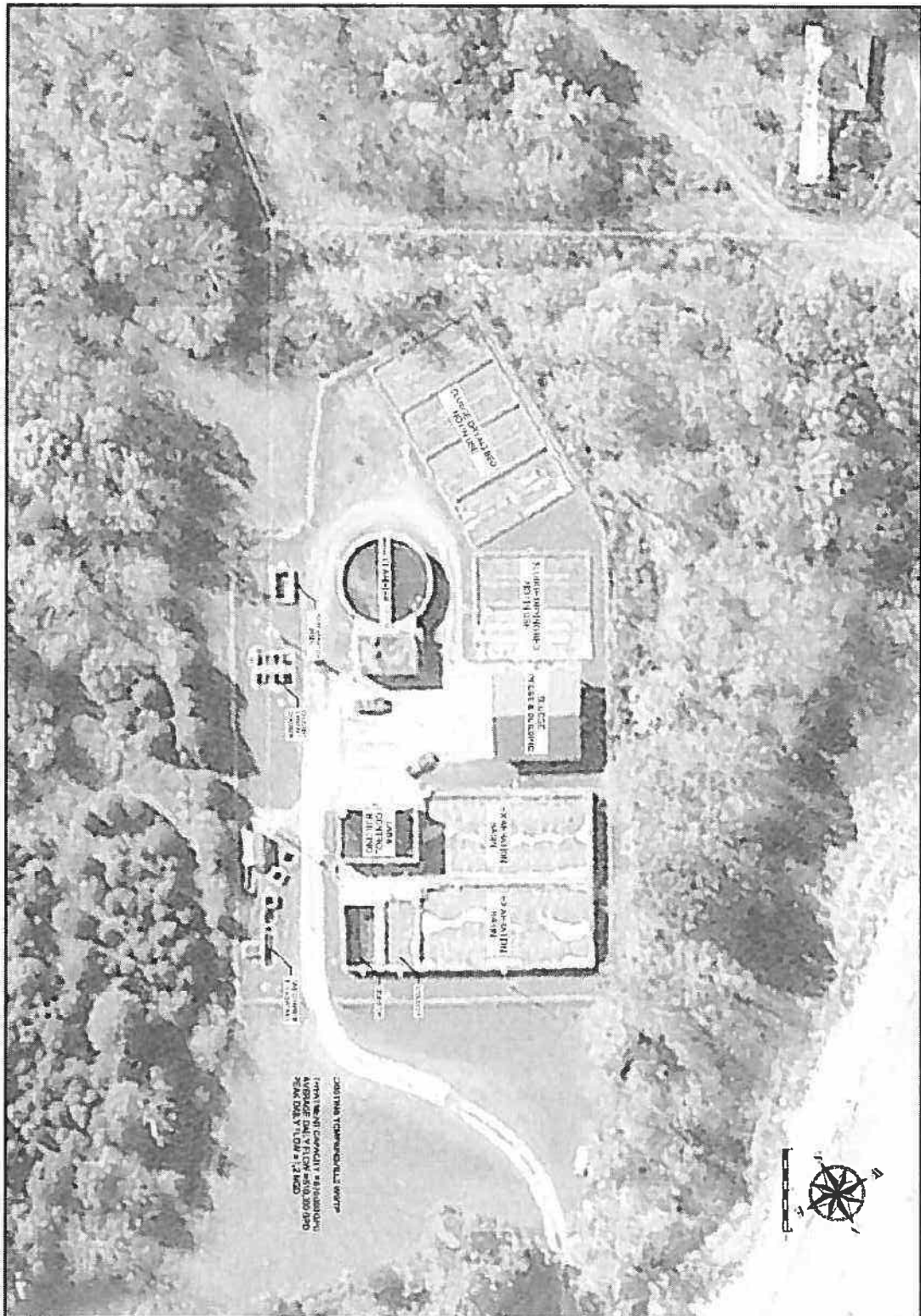
The existing WWTP is located at Lat: 36°42'0.94"N Lon: 85°42'22.94"W, see the attached maps.

Sincerely,


PRECISION ENGINEERING, LLC

Thom Kendall

Thom Kendall



EXISTING TOMPKINSVILLE WWTP
TREATMENT CAPACITY 18,000 GPD
AVERAGE DAILY FLOW 10,000 GPD
PEAK DAILY FLOW 12,000 GPD

C-1		DATE: 10/1/10 DRAWN BY: J. B. BROWN CHECKED BY: J. B. BROWN DESIGNED BY: J. B. BROWN APP. BY: J. B. BROWN PREPARED BY: J. B. BROWN	REVISIONS 1. 10/1/10 2. 10/1/10 3. 10/1/10 4. 10/1/10 5. 10/1/10 6. 10/1/10 7. 10/1/10 8. 10/1/10 9. 10/1/10 10. 10/1/10	TOMPKINSVILLE WWTP SBR CONVERSION & SANITARY SEWER IMPROVEMENTS EXISTING WWTP LAYOUT	 PRECISION ENGINEERING, LLC
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Thom Kendall

From: Neal, Russell S (EEC) <Russell.Neal@ky.gov>
Sent: Wednesday, September 27, 2017 12:12 PM
To: Thom Kendall
Cc: Dials, Lori (EEC)
Subject: RE: Tompkinsville WWTP

Importance: High

Hello again Mr. Kendall,

Once the Facility Plan is drafted, please send me one hard copy and one digital copy. Either I or one of my staff will conduct a cursory review of the Plan to determine if it contains all the required elements. We can usually get this done within a week. Once we've completed the cursory review, we'll contact you regarding setting up the public meeting. The Facility Plan must be posted on the DOW's website for public comment for at least 30 days prior to the public meeting. Also, the public notice for the meeting must be published no less than 15 days before the public meeting.

Also, please send a copy of the shapefiles of the planning area and phases of construction.

If you have further questions please don't hesitate to ask.

Thanks,

Russell Neal
Environmental Control Supervisor
Wastewater Municipal Planning & Capacity Development Section
Water Infrastructure Branch
Kentucky Division of Water
502-782-7026

From: Thom Kendall [mailto:thom@precision-engr.com]
Sent: Wednesday, September 27, 2017 9:47 AM
To: Neal, Russell S (EEC)
Subject: Tompkinsville WWTP

Mr. Neal:

I know it's been a while since we met on August 11th on the Tompkinsville WWTP project and I just wanted to touch base with you and make sure I understand the chain of events that needs to take place. We are working on our facilities plan now and I e-mailed Courtney Seitz a "waste load allocation" request. Once we get that, finish the Facilities Plan, hold a public meeting to accept the revised plan and get a "commitment letter" signed we should be ready to submit, correct?

Thank you for your assistance,

Thom Kendall
Estimator / Inspector
PO Box #2
Tompkinsville, KY 42167

Thom Kendall

From: Neal, Russell S (EEC) <Russell.Neal@ky.gov>
Sent: Wednesday, September 27, 2017 1:58 PM
To: 'Thom Kendall' (thom@precision-engr.com)
Subject: RE: Tompkinsville WWTP

Importance: High

Mr. Kendall,

Please disregard my statement regarding the 15 day requirement for publishing the public notice. The Facility Plan must be made available to the public at City Hall and well as on the DOW website. The public should be notified of the Facility Plan and the public hearing prior to this 30 day period. I apologize for the confusion. Please call me if you need further clarification

Thank you,

Russell Neal
Environmental Control Supervisor
Wastewater Municipal Planning & Capacity Development Section
Water Infrastructure Branch
Kentucky Division of Water
502-782-7026

From: Neal, Russell S (EEC)
Sent: Wednesday, September 27, 2017 1:12 PM
To: 'Thom Kendall'
Cc: Dials, Lori (EEC)
Subject: RE: Tompkinsville WWTP
Importance: High

Hello again Mr. Kendall,

Once the Facility Plan is drafted, please send me one hard copy and one digital copy. Either I or one of my staff will conduct a cursory review of the Plan to determine if it contains all the required elements. We can usually get this done within a week. Once we've completed the cursory review, we'll contact you regarding setting up the public meeting. The Facility Plan must be posted on the DOW's website for public comment for at least 30 days prior to the public meeting. Also, the public notice for the meeting must be published no less than 15 days before the public meeting.

Also, please send a copy of the shapefiles of the planning area and phases of construction.

If you have further questions please don't hesitate to ask.

Thanks,

Russell Neal
Environmental Control Supervisor
Wastewater Municipal Planning & Capacity Development Section
Water Infrastructure Branch
Kentucky Division of Water

Thom Kendall

From: Seitz, Courtney (EEC) <Courtney.Seitz@ky.gov>
Sent: Friday, October 6, 2017 2:20 PM
To: Thom Kendall
Subject: RE: Tompkinsville WWTP Improvements
Attachments: Tompkinsville WWTP Prelim Response 10-6-17.pdf

Mr. Kendall,

Attached is a letter providing preliminary limits for the project described in your August 29, 2017 correspondence regarding improvements at the subject facility.

Please let me know if you have any questions.

Thanks,
Courtney

Courtney Seitz, WLA Coordinator
Wet Weather Section
Surface Water Permits Branch
Division of Water
300 Sower Boulevard, 3rd Floor
Frankfort, Kentucky 40601
(502) 782-7066
Courtney.Seitz@ky.gov

**** This communication may contain privileged and/or confidential information. If you are not the intended recipient, you are hereby notified that disclosing, copying or distributing the contents is strictly prohibited. If you have received this message in error, please contact the sender immediately and destroy any copies of this document. ****

From: Thom Kendall [mailto:thom@precision-engr.com]
Sent: Monday, August 28, 2017 5:22 PM
To: Seitz, Courtney (EEC) <Courtney.Seitz@ky.gov>
Subject: Tompkinsville WWTP Improvements

Mr. Seitz:

I've attached our formal letter requesting the waste load allocation for the City of Tompkinsville WWTP project. The file is larger because of the images so please use the link below. If you have any trouble please let me know.

https://1drv.ms/b/s!AsJzKuHYGS8KgQKYiXXx6_5Xd23k

Thank you,

Thom Kendall
Estimator / Inspector
PO Box #2
Tompkinsville, KY 42167

Office: 270.407.5784
www.precision-engr.com





MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

**ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION**

AARON B. KEATLEY
COMMISSIONER

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601

October 6, 2017

Mr. Thom Kendall
Precision Engineering, LLC
P.O. Box 2
Tompkinsville, Kentucky 42167

Re: Waste Load Allocation Request
Tompkinsville Wastewater System and
Treatment Plant Renovation
KPDES No.: KY0020702
Monroe County, Kentucky

Dear Mr. Kendall:

This is in response to your August 29, 2017 letter (attached), requesting preliminary limits for renovation of the existing 0.67 MGD extended aeration wastewater treatment plant (WWTP) to a 1.7 MGD Sequencing Batch Reactor (SBR) WWTP. Discharge is to remain to Curtis Branch near National Hydrography Dataset (NHD) River Mile (RM) 1.1. Per your correspondence, the following additional improvements will be constructed:

1. Approximately 5,500 LF of sanitary sewer mains will be rehabilitated to eliminate infiltration and inflow.
2. A new force main will be extended to the Joe Harrison Carter Elementary School and lift station installed to eliminate the school package treatment plant.
3. A new SCADA system will be installed throughout the collection system to facilitate proper monitoring and control of the new SBR WWTP and the City's ten (10) lift stations.
4. Variable frequency drives (VFDs) will be installed on all lift stations to reduce power consumption.

The requested waste load allocation information will be utilized in drafting a Regional Wastewater Facilities Plan update.

Considering the above-mentioned information, applicable effluent limitations are provided below.

Mr. Thom Kendall
Waste Load Allocation Request
Page Two

Design Capacity = 1.7 MGD / Discharge near NHD RM 1.1 of Curtis Branch

<u>Parameter</u>	<u>May 1 - October 31</u>	<u>November 1 - April 30</u>
BOD ₅	20 mg/l	20 mg/l
Total Suspended Solids	30 mg/l	30 mg/l
Ammonia Nitrogen	4 mg/l	10 mg/l
Dissolved Oxygen	7 mg/l	7 mg/l
Total Phosphorus	Monitor, mg/l	Monitor, mg/l
Total Nitrogen	Monitor, mg/l	Monitor, mg/l
Total Residual Chlorine	0.011 mg/l	0.019 mg/l

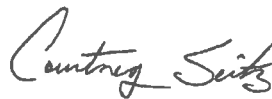
Reliability Classification = Grade C

In addition to the above limits, the monthly average and maximum weekly average values of *Escherichia coli* shall be at or below 130 colonies per 100 milliliters or 240 colonies per 100 milliliters, respectively, the year around. If a form of chlorine is proposed to disinfect the wastewater, then de-chlorination will likely be needed to achieve the chlorine residual effluent concentration. Additional effluent limitations and water quality standards are contained in 401 KAR Chapter 5 and 401 KAR Chapter 10.

These preliminary design effluent limitations are valid for one (1) year from the date of this letter, and are subject to change as a result of additional information which may be presented during the public notice phase of the Kentucky Pollutant Discharge Elimination System (KPDES) permitting process. As such, this letter does not convey any authorization or approval to proceed with the construction or operation of the proposed WWTP. Construction and KPDES permit applications must be submitted to request such authorization or approval. Nor does this letter ensure issuance of either permit. During the review processes of these permits the Division of Water will further evaluate the viability of the project.

Should you have any questions regarding this letter, please contact me at (502) 782-7066 or E-mail at Courtney.Seitz@ky.gov.

Sincerely,



Courtney Seitz, WLA Coordinator
Wet Weather Section
Surface Water Permits Branch
Division of Water

CS

c: Russell Neal, Water Infrastructure Branch
Compliance and Technical Assistance
Branch, Columbia Section
TEMPO



MATTHEW G. BEVIN
GOVERNOR

**ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION**

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601

CHARLES G. SNAVELY
SECRETARY

ANTHONY R. HATTON
COMMISSIONER

August 22, 2019

Steve Harris
Precision Engineering, LLC
P.O. Box 2
Tompkinsville, KY 42167

Re: Wasteload Allocation Renewal Request
KPDES No.: KY0020702
Tompkinsville Wastewater System and Treatment
Monroe County, Kentucky

Dear Mr. Harris:

This is in response to your July 19, 2019 email requesting a renewal of the preliminary limits for the construction of the subject wastewater treatment plant (WWTP) located at National Hydrography Dataset (NHD) River Mile (RM) 1.1 of Curtis Branch with a design capacity increasing from 0.67 MGD to 0.8 MGD. This increase is required to better serve the community, which has seen an increase in activity.

Per the previous WLA approval letter, the following improvements will be constructed:

- 1) Approximately 5,500 LF of sanitary sewer mains will be rehabilitated to eliminate infiltration and inflow.
- 2) A new force main will be extended to the Joe Harrison Carter Elementary School and a lift station installed to eliminate the school package treatment plant.
- 3) A new SCADA system will be installed throughout the collection system to facilitate proper monitoring and control of the new SBR WWTP and the city's ten (10) lift stations.
- 4) Variable frequency drives (VFDs) will be installed on all lift stations to reduce power consumption.

Considering the above-mentioned information, applicable effluent limitations are provided below.

Design Capacity = 0.8 MGD / Near NHD RM 1.1 of Curtis Branch

<u>Parameter</u>	<u>May 1 – October 31</u>	<u>November 1 - April 30</u>
CBODs	20 mg/l	20 mg/l
Total Suspended Solids	30 mg/l	30 mg/l
Ammonia Nitrogen	4 mg/l	10 mg/l
Dissolved Oxygen	7 mg/l	7 mg/l
Total Phosphorus	Monitor, mg/l	Monitor, mg/l
Total Nitrogen	Monitor, mg/l	Monitor, mg/l

Reliability Classification = Grade C

In addition to the above limits, the monthly average and maximum weekly average values of *Escherichia coli* shall be at or below 130 colonies per 100 milliliters or 240 colonies per 100 milliliters, respectively, the year around. If a form of chlorine is proposed to disinfect the wastewater, then de-chlorination will likely be needed to achieve the chlorine residual effluent concentration. Additional effluent limitations and water quality standards are contained in 401 KAR Chapter 5 and 401 KAR Chapter 10.



MATTHEW G. BEVIN
GOVERNOR

**ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION**

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601

CHARLES G. SNAVELY
SECRETARY

ANTHONY R. HATTON
COMMISSIONER

Mr. Steve Harris
Precision Engineering, LLC
Page Two

These preliminary design effluent limitations are valid for one (1) year from the date of this letter, and are subject to change as a result of additional information which may be presented during the public notice phase of the Kentucky Pollutant Discharge Elimination System (KPDES) permitting process. As such, this letter does not convey any authorization or approval to proceed with the construction or operation of the proposed WWTP. Construction and KPDES permit applications must be submitted to request such authorization or approval. Nor does this letter ensure issuance of either permit. During the review processes of these permits the Division of Water will further evaluate the viability of the project.

Should you have any questions regarding this letter, please contact me at (502) 782-6946 or E-mail at Matthew.Fields@ky.gov.

Sincerely,

A handwritten signature in black ink that reads "Matthew Fields".

Matthew Fields
WLA Coordinator
Surface Water Permits Branch
Division of Water

TP: MF

c: Russell Neal, Water Infrastructure Branch
Compliance and Technical Assistance
Branch, Columbia Regional Office
ARM

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Thom Kendall

From: Gunn, Chris (Heritage Council) <Chris.Gunn@ky.gov>
Sent: Thursday, April 20, 2017 10:08 AM
To: Thom Kendall
Subject: RE: Tompkinsville KY WWTP

Hello Mr. Kendall,

We have reviewed the project, and recommended no effect. We have not quite gotten our mail processing back up to speed since our move, but you should receive our letter soon.

Thank you,
Chris Gunn

Christopher M. Gunn, Ph.D.

Archaeology Review Coordinator
Kentucky Heritage Council
410 High Street
Frankfort, KY 40601

Phone: (502) 564-7005, ext. 4450
Fax: (502) 564-5820

KHC offices will be closed March 27-31 to accommodate our move to new offices! Beginning Monday, April 3, our new address will be the Barstow House, 410 High Street, Frankfort, KY 40601. Our phone number, 502-564-7005, and office hours, 8:30 a.m. to 4:30 p.m., will remain the same. PLEASE NOTE: Our library for above-ground resources including maps, survey and National Register files **will be unavailable March 20-31** to accommodate the move; please contact our office as soon as possible if you will need access to these materials in the immediate future. See www.heritage.ky.gov and follow us on Facebook and Twitter for updates.

From: Thom Kendall [mailto:thom@precision-engr.com]
Sent: Thursday, April 20, 2017 10:55 AM
To: Gunn, Chris (Heritage Council) <Chris.Gunn@ky.gov>
Cc: Potts, Craig A (Heritage Council) <craig.potts@ky.gov>
Subject: RE: Tompkinsville KY WWTP

Mr. Gunn:

I submitted a Section 106 coversheet requests on behalf of the City of Tompkinsville for repairs and upgrades to a waste water treatment facility a month or so ago. I was curious if the Heritage Council had ever gotten a chance to review our requests or if any additional information was needed.

Thank you very much,

Thom Kendall
Estimator / Inspector
2006 Edmonton Road

Tompkinsville, KY 42167
Office: 270.407.5784
www.precision-engr.com



From: Gunn, Chris (Heritage Council) [<mailto:Chris.Gunn@ky.gov>]
Sent: Tuesday, March 14, 2017 10:48 AM
To: thom@precision-engr.com
Subject: RE: Tompkinsville KY WWTP

Hello Mr. Thompson.

Please complete our Section 106 Coversheet so that we can review your project. This coversheet represents a formal request from the applicant (you) to ask our office if cultural resources assessments are warranted for a given project. This is the link to the Coversheet, located on the KHC website:

<http://www.heritage.ky.gov/NR/rdonlyres/C1D7C654-6F39-4F07-8A5B-BC838196E070/0/Section106CoverSheetEDITABLE.pdf>

Instructions for filling out the form are also on our website here:

http://www.heritage.ky.gov/NR/rdonlyres/7DF72305-BC70-4E0A-A2DD-F2335F87EEB0/0/SHPO_106_INSTRUCTIONS_COVER_SHEET_JULY2013_Revised.pdf

Please let me know if I can answer any additional questions concerning our Section 106 Coversheet review process.

Thank you,
Chris Gunn

Christopher M. Gunn, Ph.D.

Archaeology Review Coordinator
Kentucky Heritage Council
300 Washington Street
Frankfort, KY 40601

Phone: (502) 564-7005, ext. 122
Fax: (502) 564-5820

KHC offices will be closed March 27-31 to accommodate our move to new offices! Beginning Monday, April 3, our new address will be the Barstow House, 410 High Street, Frankfort, KY 40601. Our phone number, 502-564-7005, and office hours, 8:30 a.m. to 4:30 p.m., will remain the same. PLEASE NOTE: Our library for above-ground resources including maps, survey and National Register files **will be unavailable March 20-31** to accommodate the move; please contact our office as soon as possible if you will need access to these materials in the immediate future. See www.heritage.ky.gov and follow us on Facebook and Twitter for updates.

From: Sherrick, Yvonne (Heritage Council)
Sent: Tuesday, March 14, 2017 11:37 AM
To: Gunn, Chris (Heritage Council) <Chris.Gunn@ky.gov>
Subject: FW: Tompkinsville KY WWTP

From: Thom Kendall
Sent: Tuesday, March 14, 2017 11:33 AM
To: Sherrick, Yvonne (Heritage Council) <Yvonne.Sherrick@ky.gov>
Subject: Tompkinsville KY WWTP

Ms. Sherrick:

Precision is the engineer for the proposed Tompkinsville KY waste water treatment plant project which involves a new WWTP, repairing existing dilapidated sewer lines and extending the existing system to include an elementary school north of the city limits.

In order to comply with 401 KAR 5:006 ("Cross Cutter Correspondence & Mitigation") I must receive guidance from a specific list of agencies, the Kentucky Historical society being one of them.

Would you be my contact for this project or could you direct me to whom I should get in touch with?

Thank you,



Thom Kendall
Estimator / Inspector
2006 Edmonton Road
Tompkinsville, KY 42167
Office: 270.407.5784
www.precision-engr.com

Thom Kendall

From: Thom Kendall <thom@precision-engr.com>
Sent: Tuesday, March 14, 2017 10:31 AM
To: 'craig.potts@ky.gov'
Subject: Tompkinsville KY WWTP

Mr. Potts:

Precision is the engineer for the proposed Tompkinsville KY waste water treatment plant project which involves a new WWTP, repairing existing dilapidated sewer lines and extending the existing system to include an elementary school north of the city limits.

In order to comply with 401 KAR 5:006 ("Cross Cutter Correspondence & Mitigation") I must receive guidance from a specific list of agencies, the Kentucky Historical society being one of them.

Would you be my contact for this project or could you direct me to whom I should get in touch with?

Thank you,



Thom Kendall

Estimator / Inspector
2006 Edmonton Road
Tompkinsville, KY 42167
Office: 270.407.5784
www.precision-engr.com

From: Thom Kendall]
Sent: Tuesday, March 14, 2017 11:33 AM
To: Sherrick, Yvonne (Heritage Council) <Yvonne.Sherrick@ky.gov>
Subject: Tompkinsville KY WWTP

Ms. Sherrick:

Precision is the engineer for the proposed Tompkinsville KY waste water treatment plant project which involves a new WWTP, repairing existing dilapidated sewer lines and extending the existing system to include an elementary school north of the city limits.

In order to comply with 401 KAR 5:006 ("Cross Cutter Correspondence & Mitigation") I must receive guidance from a specific list of agencies, the Kentucky Historical society being one of them.

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Thank you,



Thom Kendall
Estimator / Inspector
2006 Edmonton Road
Tompkinsville, KY 42167
Office: 270.407.5784
www.precision-engr.com



2006 Edmonton Road • Tompkinsville, KY 42167 • Phone (270) 407-5784 • Fax (270) 487-8029

March 14, 2017

Craig Potts, Executive Director/SHPO
Kentucky Heritage Council
300 Washington St.
Frankfort, KY 40601

RE: City of Tompkinsville Regional Facility Plan

Dear Mr. Potts:

The City of Tompkinsville Kentucky is amending their existing 201 Facility Plan. The amended facilities plan includes an upgrade to an existing waste water treatment plant, repair/replacement of approximately six thousand (6,000 LF) linear feet of existing sewer pipe and adding approximately two (2) miles of sewer force main to accommodate an existing Elementary School north of the city limits. In the process an existing private waste water treatment plant servicing the school will be removed.

The information included contains a project description, existing and proposed site layout for the waste water treatment plant along with a location map for the sewer extension, WWTP location and sewer line rehabilitation/replacement area.

Please provide comment on the environmental impact these projects may have on threatened or endangered species and their habitats. If you have any questions while reviewing the information, please contact me at the number listed above or you can e-mail me at thom@precision-engr.com

Sincerely,
PRECISION ENGINEERING, LLC

Thom Kendall

Thom Kendall

Project Description:

Due to local needs and maintenance reasons further discussed in this plan, the City is proposing to update the WWTP (WWTP), replace and/or repair 6000 feet of the City's sewer pipes, and add 2 miles of force main to accommodate Joe Harrison Carter Elementary. The construction of these new facilities will alleviate a portion of the existing WWTP's flow, the City plans to expand its collection system to include service to approximately 20 new residential & commercial customers, and develop a force main that will eventually close the Joe Harrison Carter Elementary package plant and route the flow to the updated WWTP. Due to the City's needs and development aspirations, this document is not intended to replace the current Regional Facilities Plan but to amend and update it. The main differences in the Plan submitted in year 2000 and this one, is the proposed construction of an updated WWTP. The existing plant is in good condition but experiences large amounts of I/I at times. The construction of the updated plant will allow the plant to accrue a higher peak flow and treat a higher average flow. Various replacement projects are also included and will serve as the City's effort to eliminate the I/I issues throughout the system.

As indicated on the attached drawings the existing treatment capacity of the waste water treatment plant is 670,000 gallons per day with an average daily flow of 350,000 gallons per day. The proposed upgrades to the waste water treatment plant would increase the capacity to 1.02 million gallons per day and the average daily flow to 510,000 gallons per day. Repair and/or replacement of the 6,000 LF of sewer line will decrease ground infiltration while removing the private WWTP utilized by the school should have a positive impact on their aging system while reducing ground water impacts.

The accompanying map (Sewer System Map) shows the project in its entirety. Green lines on the drawing represent existing sewer lines, green lines with red hatching overlaid on them represent the 6,000 LF of sewer lines to be replaced/repared. The red line leading north out of the city limits is the proposed 4" force main. The existing waste water treatment plant is shown on the map; the proposed changes to the plant are to take place in the same location.

KENTUCKY HERITAGE COUNCIL COVER SHEET FOR SECTION 106 REVIEW AND COMPLIANCE

When federal (and some state) funds, permits or approvals are needed for a project, regulations such as 36 CFR Part 800 require agencies or their delegates to consult with the Kentucky Heritage Council/State Historic Preservation Office regarding the project's potential effects on historic properties. To facilitate our review, please provide the following information and applicable attachments. Our office will generate a response within 30 days of receipt. Incomplete submissions may result in review delays.

SECTION 1: APPLICANT INFORMATION

Project Sponsor or Applicant: City of Tompkinsville

Contact Person (name & position): Thom Kendall

Telephone: 270-407-5784

E-mail: thom@precision-engr.com

Project Title: City of Tompkinsville WWTP

SECTION 2: AGENCY INFORMATION

Funding/Permitting Agency: KY Division of Water

Agency Contact Person (name & position): Terry Humphries

Telephone: 502-782-6983

E-mail: Terry.Humphries@ky.gov

SECTION 3: PROJECT LOCATION

E911 Street Address (or other description): 825 Poplar Logging Road

City/Township: Tompkinsville

County: Monroe

Latitude: 36d 42'0.99" N

Longitude: 85d 42' 22.77" W

SECTION 4: PROJECT TYPE (please check all that apply)

Proposed Activity: ☐ Demolition ☐ Rehabilitation ☐ Structural Relocation ☐ Trails

☒ New Construction ☐ Land and/or Building Acquisition ☒ Sewer/Water Lines ☐ Roads/Bridges

☐ Non-Construction Planning/Refinancing ☐ Other (describe):

SECTION 5: IDENTIFICATION OF KNOWN HISTORIC PROPERTIES

KHC Preliminary Site Check #:

OSA Preliminary Site Check #:

If your project involves ground disturbance, has the site been previously disturbed?

☒ Yes (describe in detail below) ☐ No

All lines will be placed in previously disturbed right-of-way and replacing existing equipment.

Is there anything over 50 years of age in or visible from the project location? ☐ Yes ☒ No

SECTION 6: ATTACHMENTS

Please attach the following documentation as applicable. All documentation should be labeled with the project name or site address.

- ☐ Clear, current photographs of the project site and anything over 50 years of age in or visible from it.
- ☒ Site map/plan indicating the exact location and boundaries of the project area.
- ☒ Detailed description of the project (may include plans, scope of work, and other available information.)
- ☒ Documentation of prior ground disturbance (e.g. maps, photographs, underground utility plans, etc.)
- ☐ Any known information about the history/use of the property and local significance.

We are unable to accept electronic submissions at this time. Please submit all information to **Craig Potts, Executive Director/SHPO, Kentucky Heritage Council, 300 Washington St., Frankfort, KY 40601.**



MATTHEW G. BEVIN
GOVERNOR

**TOURISM, ARTS AND HERITAGE CABINET
KENTUCKY HERITAGE COUNCIL**

REGINA STIVERS
DEPUTY SECRETARY

DON PARKINSON
SECRETARY

THE STATE HISTORIC PRESERVATION OFFICE

410 HIGH STREET
FRANKFORT, KENTUCKY 40601
PHONE (502) 564-7005
FAX (502) 564-5820
www.heritage.ky.gov

CRAIG A. POTTS
EXECUTIVE DIRECTOR
& STATE HISTORIC
PRESERVATION OFFICER

April 18, 2017

Mr. Thom Kendall
Precision Engineering, LLC
2006 Edmonton Road
Tompkinsville, KY 42167

Re: City of Tompkinsville Regional Facility Plan

Dear Mr. Kendall:

Thank you for your letter regarding the above-mentioned project, received March 16, 2017. This letter describes the proposed rehabilitation and expansion of the City of Tompkinsville 201 Facility Plan. The proposed project entails upgrading the existing water treatment plant, repair and/or replacement of approximately 6,000 linear feet of existing sewer pipe, and the construction of approximately two miles of sewer force main to connect the Joe Harrison Carter Elementary School to the existing sewer system. The new sewer force main will be placed in existing right-of-way along Kentucky Highway 163. After review of your submission, we do not recommend an archaeological survey or cultural-historical survey. We recommend that the proposed project will result in **No Effect to Historic Properties**.

If the project design or boundaries change, this office should be consulted to determine the nature and extent of additional documentation that may be needed. In the event of the unanticipated discovery of an archaeological site or object of antiquity, the discovery should be reported to the Kentucky Heritage Council and to the Kentucky Office of State Archaeology in the Anthropology Department at the University of Kentucky in accordance with KRS 164.730. In the event that human remains are encountered during project activities, all work should be immediately stopped in the area and the area cordoned off, and in accordance with KRS 72.020 the county coroner and local law enforcement must be contacted immediately. Upon confirmation that the human remains are not of forensic interest, the unanticipated discovery must be reported to the Kentucky Heritage Council.

Should the project plans change, or should additional information become available regarding cultural resources or citizens' concerns regarding impacts to cultural resources, please submit that information to our office as additional consultation may be warranted. Should you have any questions, feel free to contact Chris Gunn of my staff at 502.564.7005, extension 4450 or chris.gunn@ky.gov.

Sincerely,

Craig A. Potts,
Executive Director and
State Historic Preservation Officer

CP:cmg KHC # 48746

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Thom Kendall

From: Thom Kendall <thom@precision-engr.com>
Sent: Tuesday, March 14, 2017 2:42 PM
To: 'Doug.Dawson@ky.gov'
Subject: Tompkinsville KY WWTP
Attachments: KY Dept of Fish_Wildlife.pdf

Mr. Dawson:

I've attached Precision's submittal packet for the Tompkinsville WWTP improvements cross cutter correspondence solicitation. If you have any questions or have trouble opening the attached files please let me know.

Thank you,



Thom Kendall

Estimator / Inspector
2006 Edmonton Road
Tompkinsville, KY 42167
Office: 270.407.5784
www.precision-engr.com



PRECISION
ENGINEERING, LLC

2006 Edmonton Road • Tompkinsville, KY 42167 • Phone (270) 407-5784 • Fax (270) 487-8029

March 14, 2017

Doug Dawson
Environmental Section Chief
Kentucky Dept. of Fish & Wildlife Resources
#1 Sportsman's Lane
Frankfort, KY 40601

RE: City of Tompkinsville Regional Facility Plan

Dear Mr. Dawson:

The City of Tompkinsville Kentucky is amending their existing 201 Facility Plan. The amended facilities plan includes an upgrade to an existing waste water treatment plant, repair/replacement of approximately six thousand (6,000 LF) linear feet of existing sewer pipe and adding approximately two (2) miles of sewer force main to accommodate an existing Elementary School north of the city limits. In the process an existing private waste water treatment plant servicing the school will be removed.

The information included contains a project description, existing and proposed site layout for the waste water treatment plant along with a location map for the sewer extension, WWTP location and sewer line rehabilitation/replacement area.

Please provide comment on the environmental impact these projects may have on threatened or endangered species and their habitats. If you have any questions while reviewing the information, please contact me at the number listed above or you can e-mail me at thom@precision-engr.com

Sincerely,
PRECISION ENGINEERING, LLC

Thom Kendall

Thom Kendall



Project Description:

Due to local needs and maintenance reasons further discussed in this plan, the City is proposing to update the WWTP (WWTP), replace and/or repair 6000 feet of the City's sewer pipes, and add 2 miles of force main to accommodate Joe Harrison Carter Elementary. The construction of these new facilities will alleviate a portion of the existing WWTP's flow, the City plans to expand its collection system to include service to approximately 20 new residential & commercial customers, and develop a force main that will eventually close the Joe Harrison Carter Elementary package plant and route the flow to the updated WWTP. Due to the City's needs and development aspirations, this document is not intended to replace the current Regional Facilities Plan but to amend and update it. The main differences in the Plan submitted in year 2000 and this one, is the proposed construction of an updated WWTP. The existing plant is in good condition but experiences large amounts of I/I at times. The construction of the updated plant will allow the plant to accrue a higher peak flow and treat a higher average flow. Various replacement projects are also included and will serve as the City's effort to eliminate the I/I issues throughout the system.

As indicated on the attached drawings the existing treatment capacity of the waste water treatment plant is 670,000 gallons per day with an average daily flow of 350,000 gallons per day. The proposed upgrades to the waste water treatment plant would increase the capacity to 1.02 million gallons per day and the average daily flow to 510,000 gallons per day. Repair and/or replacement of the 6,000 LF of sewer line will decrease ground infiltration while removing the private WWTP utilized by the school should have a positive impact on their aging system while reducing ground water impacts.

The accompanying map (Sewer System Map) shows the project in its entirety. Green lines on the drawing represent existing sewer lines, green lines with red hatching overlaid on them represent the 6,000 LF of sewer lines to be replaced/repaired. The red line leading north out of the city limits is the proposed 4" force main. The existing waste water treatment plant is shown on the map; the proposed changes to the plant are to take place in the same location.

Thom Kendall

From: Dawson, Doug (FW) <Doug.Dawson@ky.gov>
Sent: Tuesday, March 14, 2017 11:32 AM
To: 'Thom Kendall'
Subject: RE: Tompkinsville KY WWTP

Mr. Kendall,

I am the contact person for this service. You can email your project description, map, and any additional information you may have concerning the proposed project.

Thank you,

Doug

Doug Dawson
Environmental Section Chief
Kentucky Dept. of Fish & Wildlife Resources
#1 Sportsman's Lane
Frankfort, KY 40601
PH: 502-564-7109 ext. 4472
Fax: 502-564-4519

visit our website at www.fw.ky.gov

Did you know...The world record smallmouth bass (11 lb. 15 oz) was caught in Kentucky?

Experience the Unbridled Spirit of Kentucky

www.kentuckyunbridledspirit.com

Buy your hunting or fishing license today.

From: Thom Kendall [mailto:thom@precision-engr.com]
Sent: Tuesday, March 14, 2017 11:35 AM
To: Dawson, Doug (FW) <Doug.Dawson@ky.gov>
Subject: Tompkinsville KY WWTP

Mr. Dawson:

Precision is the engineer for the proposed Tompkinsville KY waste water treatment plant project which involves a new WWTP, repairing existing dilapidated sewer lines and extending the existing system to include an elementary school north of the city limits.

In order to comply with 401 KAR 5:006 ("Cross Cutter Correspondence & Mitigation") I must receive guidance from a specific list of agencies, the Kentucky Dept. of Fish & Wildlife being one of them.

Would you be my contact for this project or could you direct me to whom I should get in touch with?

Thank you,



Thom Kendall
Estimator / Inspector

2006 Edmonton Road
Tompkinsville, KY 42167
Office: 270.407.5784
www.precision-engr.com

Thom Kendall

From: Dawson, Doug (FW) <Doug.Dawson@ky.gov>
Sent: Thursday, March 16, 2017 9:43 AM
To: 'Thom Kendall'
Subject: RE: Tompkinsville KY WWTP
Attachments: KDFWR Comment Letter.pdf

Mr. Kendall,

Attached is our comment letter concerning the subject project. Let me know if you need any additional information.

Have a great day,

Doug

Doug Dawson
Environmental Section Chief
Kentucky Dept. of Fish & Wildlife Resources
#1 Sportsman's Lane
Frankfort, KY 40601
PH: 502-564-7109 ext. 4472
Fax: 502-564-4519

visit our website at www.fw.ky.gov

Did you know...The world record smallmouth bass (11 lb. 15 oz) was caught in Kentucky?

Experience the Unbridled Spirit of Kentucky

www.kentuckyunbridledspirit.com

[Buy your hunting or fishing license today.](#)

From: Thom Kendall [mailto:thom@precision-engr.com]
Sent: Wednesday, March 15, 2017 9:03 AM
To: Dawson, Doug (FW) <Doug.Dawson@ky.gov>
Subject: RE: Tompkinsville KY WWTP

Thank you very much!

Thom Kendall

From: Dawson, Doug (FW) [mailto:Doug.Dawson@ky.gov]
Sent: Wednesday, March 15, 2017 7:39 AM
To: 'Thom Kendall' <thom@precision-engr.com>
Subject: RE: Tompkinsville KY WWTP

Mr. Kendall,

I received both emails. We will review and send a comment letter to you. I should be able to get a letter to you by the end of the week or first of next week.

Thank you,

Doug

Doug Dawson

Environmental Section Chief
Kentucky Dept. of Fish & Wildlife Resources
#1 Sportsman's Lane
Frankfort, KY 40601
PH: 502-564-7109 ext. 4472
Fax: 502-564-4519
visit our website at www.fw.ky.gov

Did you know...The world record smallmouth bass (11 lb. 15 oz) was caught in Kentucky?
Experience the Unbridled Spirit of Kentucky
www.kentuckyunbridledspirit.com

[Buy your hunting or fishing license today.](#)

From: Thom Kendall [<mailto:thom@precision-engr.com>]

Sent: Tuesday, March 14, 2017 3:56 PM

To: Dawson, Doug (FW) <Doug.Dawson@ky.gov>

Subject: Tompkinsville KY WWTP



Thom Kendall

Estimator / Inspector

2006 Edmonton Road

Tompkinsville, KY 42167

Office: 270.407.5784

www.precision-engr.com



**TOURISM, ARTS AND HERITAGE CABINET
KENTUCKY DEPARTMENT OF FISH & WILDLIFE RESOURCES**

Matthew G. Bevin
Governor

#1 Sportsman's Lane
Frankfort, Kentucky 40601
Phone (502) 564-3400
1-800-858-1549
Fax (502) 564-0506
fw.ky.gov

Regina Stivers
Deputy Secretary

Don Parkinson
Secretary

Gregory K. Johnson
Commissioner

March 16, 2017

Precision Engineering, LLC
Attn: Thom Kendall
2006 Edmonton Road
Tompkinsville, KY 42167

RE: City of Tompkinsville Regional Facility Plan

Dear Mr. Kendall:

The Kentucky Department of Fish and Wildlife Resources (KDFWR) have received your request for information pertaining to the subject project. Due to the location and nature of the project, the KDFWR does not anticipate impacts to federal or state-listed species, critical habitat, wetlands, or any unique natural areas because of the project. To minimize impacts to the aquatic environment, the KDFWR recommends erosion control measures be developed and implemented prior to construction to reduce siltation into waterways and/or karst features located within the project area. Such erosion control measures may include, but are not limited to silt fences, staked straw bales, brush barriers, sediment basins, and diversion ditches. Erosion control measures will need to be installed prior to construction and should be inspected and repaired regularly as needed.

I hope this information is helpful to you, and if you have questions or require additional information, please call me at (502) 564-7109 extension 4472.

Sincerely,

Doug Dawson

Doug Dawson
Environmental Section Chief

Cc: Environmental Section File

This page is left blank purposely

Thom Kendall

From: Thom Kendall <thom@precision-engr.com>
Sent: Tuesday, March 14, 2017 10:33 AM
To: 'yvonne.sherrick@ky.gov'
Subject: Tompkinsville KY WWTP

Ms. Sherrick:

Precision is the engineer for the proposed Tompkinsville KY waste water treatment plant project which involves a new WWTP, repairing existing dilapidated sewer lines and extending the existing system to include an elementary school north of the city limits.

In order to comply with 401 KAR 5:006 ("Cross Cutter Correspondence & Mitigation") I must receive guidance from a specific list of agencies, the Kentucky Historical society being one of them.

Would you be my contact for this project or could you direct me to whom I should get in touch with?

Thank you,



Thom Kendall

Estimator / Inspector
2006 Edmonton Road
Tompkinsville, KY 42167
Office: 270.407.5784
www.precision-engr.com

Thom Kendall

From: Lee Andrews <lee_andrews@fws.gov>
Sent: Tuesday, March 14, 2017 11:37 AM
To: Thom Kendall; Teresa Hyatt; Santiago Martin
Subject: Re: Tompkinsville KY WWTP

Santiago Martin will be the person handling your project. Send information package to [Teresa Hyatt@fws.gov](mailto:Teresa.Hyatt@fws.gov). She and Santiago are copied on this. Thanks

Lee Andrews
Field Supervisor
U.S. Fish and Wildlife Service
Kentucky Field Office
330 West Broadway, Room 265
Frankfort, KY 40601

502/695-0468 x108
502/695-1024 fax
502/229-4616 cell

NOTE: This email correspondence and any attachments to and from this sender are subject to the Freedom of Information Act (FOIA) and may be disclosed to third parties.

On Mar 14, 2017, at 11:28 AM, Thom Kendall <thom@precision-engr.com> wrote:

Mr. Andrews:

Precision is the engineer for the proposed Tompkinsville KY waste water treatment plant project which involves a new WWTP, repairing existing dilapidated sewer lines and extending the existing system to include an elementary school north of the city limits.

In order to comply with 401 KAR 5:006 ("Cross Cutter Correspondence & Mitigation") I must receive guidance from a specific list of agencies, the Kentucky Ecological Services Field Office being one of them.

Would you be my contact for this project or could you direct me to whom I should get in touch with?

Thank you,

<image001.png>

Thom Kendall

Estimator / Inspector

2006 Edmonton Road

Tompkinsville, KY 42167

Office: 270.407.5784

www.precision-engr.com

Thom Kendall

From: Thom Kendall <thom@precision-engr.com>
Sent: Tuesday, March 14, 2017 2:40 PM
To: 'Teresa_Hyatt@fws.gov'
Subject: Tompkinsville KY WWTP
Attachments: KY Ecological Services.pdf

Ms. Hyatt:

I've attached Precision's submittal packet for the Tompkinsville WWTP improvements cross cutter correspondence solicitation. If you have any questions or have trouble opening the attached files please let me know.

Thank you,



Thom Kendall

Estimator / Inspector
2006 Edmonton Road
Tompkinsville, KY 42167
Office: 270.407.5784
www.precision-engr.com



PRECISION
ENGINEERING, LLC

2006 Edmonton Road • Tompkinsville, KY 42167 • Phone (270) 407-5784 • Fax (270) 487-8029

March 14, 2017

Mr. Santiago Martin
Fish and Wildlife Service
Kentucky Ecological Services Field Office
330 West Broadway, Suite 265
Frankfort, KY 40601

RE: City of Tompkinsville Regional Facility Plan

Dear Mr. Martin:

The City of Tompkinsville Kentucky is amending their existing 201 Facility Plan. The amended facilities plan includes an upgrade to an existing waste water treatment plant, repair/replacement of approximately six thousand (6,000 LF) linear feet of existing sewer pipe and adding approximately two (2) miles of sewer force main to accommodate an existing Elementary School north of the city limits. In the process an existing private waste water treatment plant servicing the school will be removed.

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Please provide comment on the environmental impact these projects may have on threatened or endangered species and their habitats. If you have any questions while reviewing the information, please contact me at the number listed above or you can e-mail me at thom@precision-engr.com

Sincerely,
PRECISION ENGINEERING, LLC

Thom Kendall

Thom Kendall

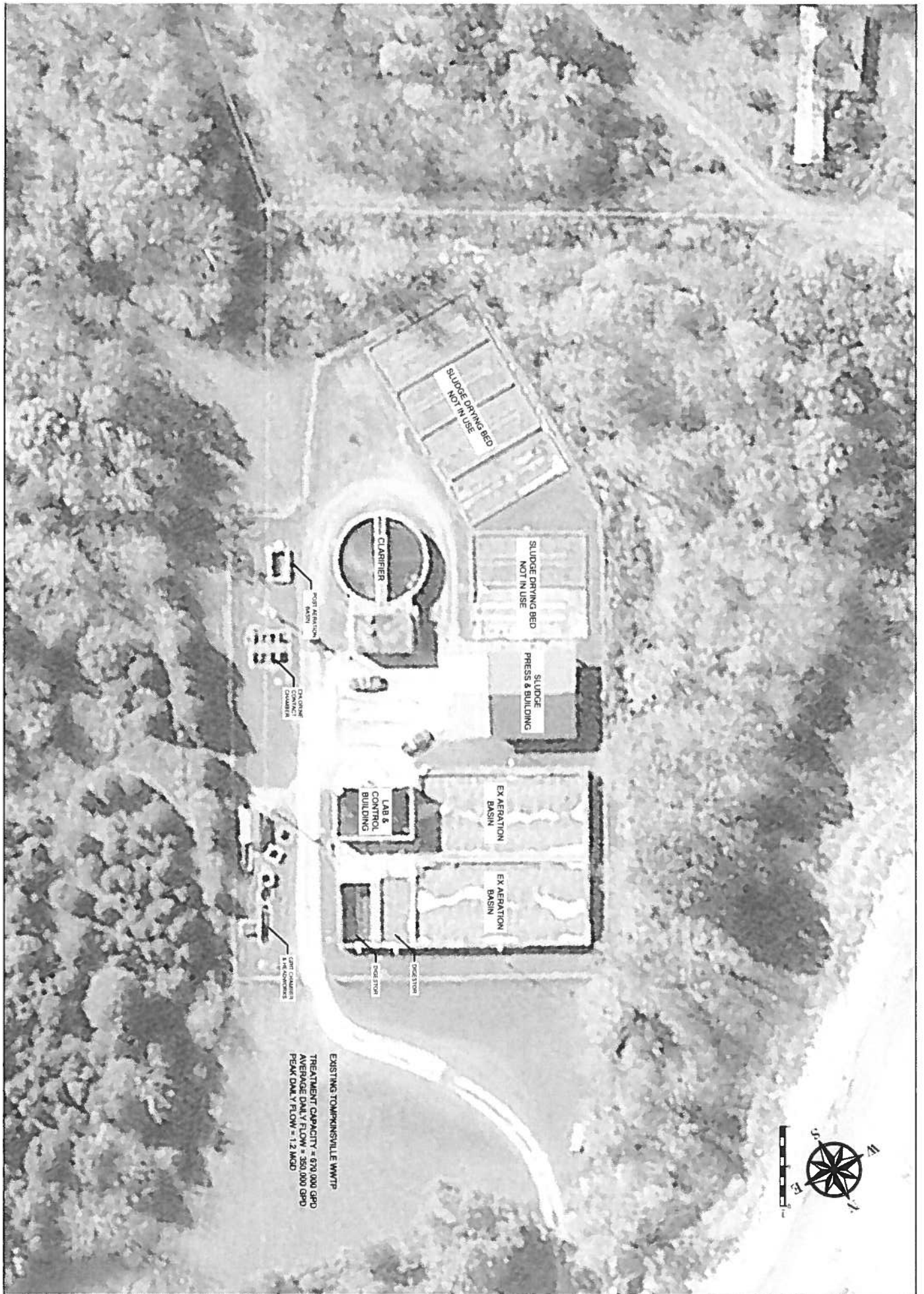


Project Description:

Due to local needs and maintenance reasons further discussed in this plan, the City is proposing to update the WWTP (WWTP), replace and/or repair 6000 feet of the City's sewer pipes, and add 2 miles of force main to accommodate Joe Harrison Carter Elementary. The construction of these new facilities will alleviate a portion of the existing WWTP's flow, the City plans to expand its collection system to include service to approximately 20 new residential & commercial customers, and develop a force main that will eventually close the Joe Harrison Carter Elementary package plant and route the flow to the updated WWTP. Due to the City's needs and development aspirations, this document is not intended to replace the current Regional Facilities Plan but to amend and update it. The main differences in the Plan submitted in year 2000 and this one, is the proposed construction of an updated WWTP. The existing plant is in good condition but experiences large amounts of I/I at times. The construction of the updated plant will allow the plant to accrue a higher peak flow and treat a higher average flow. Various replacement projects are also included and will serve as the City's effort to eliminate the I/I issues throughout the system.

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EXISTING TOMPKINSVILLE WWTP
TREATMENT CAPACITY - 675,000 GPD
AVERAGE DAILY FLOW - 350,000 GPD
PEAK DAILY FLOW - 1.2 MGD



PROPOSED TOMPKINSVILLE SBR WWTP
 TREATMENT CAPACITY = 1.02 MGD
 AVERAGE DAILY FLOW = 510,000 GPD
 PEAK HYDRAULIC FLOW = 1,100 MGD



TOMPKINSVILLE WWTP SBR CONVERSION & SANITARY SEWER IMPROVEMENTS

PROPOSED SBR WWTP



PRECISION
 ENGINEERING, LLC

REVISIONS

NO.	DATE	BY	REVIEWED BY	SCALE
1	10-21-2018	SRH	JLS	1" = 20'



DRAWN BY	JB	PEN. DATE	DESCRIPTION	DATE
APPROVED BY	SPH			
DATE	12/6/16			
SCALE	1			

CITY OF TOMPKINSVILLE
SEWER SYSTEM MAP



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Kentucky Ecological Services Field Office

J C WATTS FEDERAL BUILDING, ROOM 265, 330 WEST
BROADWAY

FRANKFORT, KY 40601

PHONE: (502)695-0468 FAX: (502)695-1024

URL: www.fws.gov/frankfort/

Consultation Code: 04EK1000-2017-SLI-0324

March 20, 2017

Event Code: 04EK1000-2017-E-01055

Project Name: Tompkinsville WWTP

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

Your concern for the protection of endangered and threatened species is greatly appreciated. The purpose of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.) (ESA) is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. The species list attached to this letter fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the ESA to provide information as to whether any proposed or listed species may be present in the area of a proposed action. This is not a concurrence letter; additional consultation with the Service may be required.

The Information in Your Species List:

The enclosed species list identifies federal trust species that may occur within the boundary that you entered into IPaC. For this list to most accurately represent the species that may potentially be affected by the proposed project, the boundary that you input into IPaC should represent the entire "action area" of the proposed project by considering all the potential "effects of the action," including potential direct, indirect, and cumulative effects, to federally-listed species or their critical habitat as defined in 50 CFR 402.02. This includes effects of any "interrelated actions" that are part of a larger action and depend on the larger action for their justification and "interdependent actions" that have no independent utility apart from the action under consideration (e.g.; utilities, access roads, etc.) and future actions that are reasonably certain to occur as a result of the proposed project (e.g.; development in response to a new road). If your project is likely to have indirect effects that extend well beyond the project footprint (e.g.;

substantial impacts to water quality), we highly recommend that you coordinate with the Service early to appropriately define your action area and ensure that you are evaluating all the species that could potentially be affected.

We must advise you that our database is a compilation of collection records made available by various individuals and resource agencies available to the Service and may not be all-inclusive. This information is seldom based on comprehensive surveys of all potential habitats and, thus, does not necessarily provide conclusive evidence that species are present or absent at a specific locality. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list.

Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and associated information. To re-access your project in IPaC, go to the IPaC web site (<https://ecos.fws.gov/ipac/>), select "Need an updated species list?", and enter the consultation code on this letter.

ESA Obligations for Federal Projects:

Under sections 7(a)(1) and 7(a)(2) of the ESA and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

If a Federal project (a project authorized, funded, or carried out by a federal agency) may affect federally-listed species or critical habitat, the Federal agency is required to consult with the Service under section 7 of the ESA, pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). Recommended contents of a Biological Assessment are described at 50 CFR 402.12. For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat.

ESA Obligations for Non-federal Projects:

Proposed projects that do not have a federal nexus (non-federal projects) are not subject to the obligation to consult under section 7 of the ESA. However, section 9 of the ESA prohibits certain activities that directly or indirectly affect federally-listed species. These prohibitions apply to all individuals subject to the jurisdiction of the United States. Non-federal project

proponents can request technical assistance from the Service regarding recommendations on how to avoid and/or minimize impacts to listed species. The project proponent can choose to implement avoidance, minimization, and mitigation measures in a proposed project design to avoid ESA violations.

Additional Species-specific Information:

In addition to the species list, IPaC also provides general species-specific technical assistance that may be helpful when designing a project and evaluating potential impacts to species. To access this information from the IPaC site (<https://ecos.fws.gov/ipac/>), click on the text “My Projects” on the left of the black bar at the top of the screen (you will need to be logged into your account to do this). Click on the project name in the list of projects; then, click on the “Project Home” button that appears. Next, click on the “See Resources” button under the “Resources” heading. A list of species will appear on the screen. Directly above this list, on the right side, is a link that will take you to pdfs of the “Species Guidelines” available for species in your list. Alternatively, these documents and a link to the “ECOS species profile” can be accessed by clicking on an individual species in the online resource list.

Next Steps:

Requests for additional technical assistance or consultation from the Kentucky Field Office should be submitted following guidance on the following page <http://www.fws.gov/frankfort/PreDevelopment.html> and the document retrieved by clicking the “outline” link at that page. When submitting correspondence about your project to our office, please include the Consultation Tracking Number in the header of this letter. (There is no need to provide us with a copy of the IPaC-generated letter and species list.)

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: Tompkinsville WWTP

Official Species List

Provided by:

Kentucky Ecological Services Field Office

J C WATTS FEDERAL BUILDING, ROOM 265

330 WEST BROADWAY

FRANKFORT, KY 40601

(502) 695-0468

<http://www.fws.gov/frankfort/>

Consultation Code: 04EK1000-2017-SLI-0324

Event Code: 04EK1000-2017-E-01055

Project Type: WASTEWATER FACILITY

Project Name: Tompkinsville WWTP

Project Description: Upgrades to an existing waste water treatment plant, repair/replacement of dilapidated sewer lines and adding an elementary school to the existing sanitary sewer system.

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Tompkinsville WWTP

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-85.70855140686037 36.70149193573555, -85.70662021636963 36.699702708795236, -85.69949626922609 36.701354304372614, -85.69185733795167 36.69763816442043, -85.68855285644533 36.701354304372614, -85.69005489349367 36.70235212617046, -85.68820953369142 36.704416543937384, -85.68752288818361 36.70857961776263, -85.68632125854492 36.71384334691293, -85.6862783432007 36.718693915273185, -85.68705081939697 36.73303742083823, -85.6900978088379 36.74755018329963, -85.68923950195314 36.752226697410656, -85.68649291992189 36.756490329505176, -85.68966865539552 36.7571092241461, -85.6919002532959 36.75312070441877, -85.69207191467287 36.74706876125466, -85.69035530090333 36.73647671215229, -85.68923950195314 36.72485128779888, -85.6900978088379 36.71439378142239, -85.6922435760498 36.70999019492863, -85.69361686706544 36.70537991991891, -85.69541931152344 36.70537991991891, -85.70855140686037 36.70149193573555)))



United States Department of Interior
Fish and Wildlife Service

Project name: Tompkinsville WWTP

Project Counties: Monroe, KY



United States Department of Interior
Fish and Wildlife Service

Project name: Tompkinsville WWTP

Endangered Species Act Species List

There are a total of 8 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Clams	Status	Has Critical Habitat	Condition(s)
fanshell (<i>Cyprogenia stegaria</i>) Population: Wherever found	Endangered		
Orangefoot pimpleback (<i>Plethobasus cooperianus</i>) Population: Wherever found	Endangered		
rabbitsfoot (<i>Quadrula cylindrica</i> ssp. <i>cylindrica</i>) Population: Wherever found	Threatened	Final designated	
ring pink (<i>Obovaria retusa</i>) Population: Wherever found	Endangered		
Rough pigtoe (<i>Pleurobema plenum</i>) Population: Wherever found	Endangered		
Mammals			
Gray bat (<i>Myotis grisescens</i>) Population: Wherever found	Endangered		
Indiana bat (<i>Myotis sodalis</i>) Population: Wherever found	Endangered		
Northern long-eared Bat (<i>Myotis</i>	Threatened		Incidental take of the



United States Department of Interior
Fish and Wildlife Service

Project name: Tompkinsville WWTP

<i>septentrionalis</i> Population: Wherever found			northern long-eared bat at this location is excepted by the 4(d) rule and is, therefore, not prohibited under the ESA.
--	--	--	--



United States Department of Interior
Fish and Wildlife Service

Project name: Tompkinsville WWTP

Critical habitats that lie within your project area

There are no critical habitats within your project area.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Kentucky Ecological Services Field Office
330 West Broadway, Suite 265
Frankfort, Kentucky 40601
(502) 695-0468

March 15, 2017

Mr. Thom Kendall
Precision Engineering, LLC
2006 Edmonton Road
Tompkinsville, Kentucky 42167

Re: FWS 2017-B-0259; City of Tompkinsville; Regional Facility Plan; Monroe County, Kentucky

Dear Mr. Kendall:

We have received your request for a species list for the above-referenced project. The Kentucky Field Office (KFO) is directing project proponents to obtain official species lists for proposed projects from the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) system located at: <https://ecos.fws.gov/ipac/>. IPaC will immediately provide you with a current species list appropriate for your proposed project and an official letter on USFWS letterhead. This list will include species currently listed as threatened or endangered, species proposed for listing, critical habitat for listed species, and bird species of conservation concern.

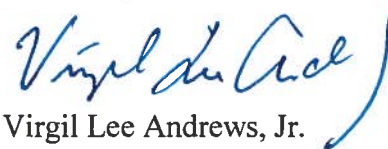
When you open the IPaC site, you will be asked to input a location for your proposed project. The location can be input in different ways. Often, the easiest way is to zoom into the vicinity of the project area on the map and use the sketch tool to approximate the boundaries of the proposed project site, plus an appropriate buffer. The location that you delineate should represent the entire "action area" of your proposed project by considering all the potential "effects of the action," including potential direct, indirect, and cumulative effects to federally-listed species or their critical habitats as defined in 50 CFR 402.02. This includes effects of any "interrelated actions" that are part of a larger action and depend on the larger action for their justification and "interdependent actions" that have no independent utility apart from the action under consideration (e.g.; utilities, access roads, etc.) and future actions that are reasonably certain to occur as a result of the proposed project (e.g.; development in response to a new road). IPaC will generate a species list specific to the action area of the proposed project, as you defined it. You can then request an official species list under the "Regulatory Documents" tab. This species list fulfills the requirements of the USFWS under section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.) to provide information as to whether any proposed or listed species may be present in the area of a proposed action.

The letter generated by IPaC will explain how to request an updated list or a revised list based on project modifications.

The official species list is **not a concurrence letter**; additional coordination with the KFO may be necessary to ensure ESA compliance. Please read the letter that accompanies the species list for further direction as to how to request technical assistance or section 7 consultation from the KFO. The IPaC-generated letter will include a project-specific consultation tracking number (e.g. 04EK 1000-2017-SLI-XXXX). Please include this tracking number in all your future correspondences with the KFO related to this project. The KFO will be able to retrieve the information that you input into IPaC; there is no need to include a printed copy of your IPaC-generated letter or species list with your correspondence.

Thank you again for your request. Your concern for the protection of endangered and threatened species is greatly appreciated. If you have any questions regarding the information that we have provided, please contact Santiago Martín at (502) 695-0468 extension 116 or santiago_martin@fws.gov.

Sincerely,

A handwritten signature in blue ink, reading "Virgil Lee Andrews, Jr.", with a stylized flourish at the end.

Virgil Lee Andrews, Jr.
Field Supervisor



P.O. Box 2 • Tompkinsville, KY 42167 • Phone (270) 407-5784 • Fax (270) 487-8029

Date: February 15, 2018

Mr. Lee Andrews, Field Supervisor
U.S. Fish & Wildlife Service
Kentucky Ecological Services
330 West Broadway, Rm 265
Frankfort, KY 40601

RE: Tompkinsville KY WWTP Consultation

Consultation Code: 04EK1000-2017-SLI-0324

Event Code: 04EK1000-2017-E-01055

Dear Mr. Andrews:

I received correspondence from you last year in regard to the proposed Tompkinsville WWTP. This project is now in the design phase of construction I would like to formally submit the project for your review to ensure that it would be in full compliance with the Endangered Species Act. I would like to request technical assistance to determine the potential for impacts to those listed species that you supplied us with in our initial correspondence.

Please see the attached required project details. If you have any questions please do not hesitate to contact me.

Sincerely,
PRECISION ENGINEERING, LLC

Thom Kendall



PRECISION
ENGINEERING, LLC

P.O. Box 2 • Tompkinsville, KY 42167 • Phone (270) 407-5784 • Fax (270) 487-8029

**Pre-Development Consultation Request
for the Tompkinsville Waste Water Treatment Plant**

- **Purpose of the proposed project:**

Due to local needs and maintenance reasons the City of Tompkinsville is proposing to update the WWTP, replace and/or fix 8,500 feet of the City's existing sewer pipes, and extend 2 miles of force main to include Joe Harrison Carter Elementary school into the system. The aging sewer system feeding the WWTP has created numerous instances for infiltration of pipes throughout the system. This has created a situation in which there is great concern for contamination of local streams. During wet weather conditions the plant experiences a vast volume of flow increase due to the sanitary sewer collection system's dilapidation which results in severe infiltration and inflow. The volume of flow increases significantly enough such that the plant is bypassed which results in a lack of proper treatment before discharging. The construction of these new facilities will alleviate a portion of the existing WWTP's flow, the City also plans to expand its collection system to include service to approximately 13 new residential & commercial customers and develop a force main that will eventually eliminate the need for the Joe Harrison Carter elementary individual package plant and route the flow to the existing WWTP. The construction of the updated plant will allow the plant to accrue a higher peak flow and treat a higher average flow.

The replacement aspect and inclusion of Joe Harrison Carter Elementary will all take place within existing right-of-way. Work done at the treatment plant will be confined to replacement and upgrade of equipment (shown on the included existing and proposed maps).

- **GPS Coordinates:** 36.700274, -85.706375 (see attached quad map and project area maps (4).)
- **Habitat Description:** Most of the project will take place within an urban setting, with the clear majority of the work being done in existing right-of-way. Currently the WWTP discharges into nearby Curtis Branch, so obviously work done at the plant site could affect this area. However, the work is confined to merely a change of equipment: as shown on the attached drawing the existing aeration basin will be upgraded to an SBR basin and the existing clarifier equipment will be upgraded to a Post Equalization Basin. Very little ground disturbance will be necessary in order to achieve these goals.

No streams or water crossings are suspected to take place during the remediation and replacement of the "downtown" sewer system.

The proposed force main intended for the inclusion of the Joe Harrison Carter Elementary along KY 163 will cross the E. Fork Barren River creek. Currently, the proposed design calls for boring under the creek to avoid water quality impact.



- Associated Components: It is likely that, although the project itself will not require a major change infrastructure, future commercial development could occur along the proposed force main leading to the elementary school. Other than that, there should be no immediate development for roadways to service lines or equipment considering that the lines will all be placed within existing right-of-way.
- The work will be carried out using traditional trenching and boring methods for the installation of utilities.

The attached photos show the existing waste water treatment plant (1&2), the existing sewer plant at Joe Harrison Carter which will be removed (3) and the google mapping of the bridge crossing KY 163 (4).



PRECISION
ENGINEERING, LLC

P.O. Box 2 • Tompkinsville, KY 42167 • Phone (270) 407-5784 • Fax (270) 487-8029

2017-8-0259
Santiago

Date: February 15, 2018

Mr. Lee Andrews, Field Supervisor
U.S. Fish & Wildlife Service
Kentucky Ecological Services
330 West Broadway, Rm 265
Frankfort, KY 40601

Significant impacts to ~~federally-listed~~ species are not likely to result from this project as currently proposed. Project re-coordination is needed if project changes or if new species or critical habitats are listed that could be impacted by the project.


Kentucky Field Supervisor
U.S. Fish and Wildlife Service


Date

RE: Tompkinsville KY WWTP Consultation

Consultation Code: 04EK1000-2017-SLI-0324

Event Code: 04EK1000-2017-E-01055

Dear Mr. Andrews:

I received correspondence from you last year in regard to the proposed Tompkinsville WWTP. This project is now in the design phase of construction I would like to formally submit the project for your review to ensure that it would be in full compliance with the Endangered Species Act. I would like to request technical assistance to determine the potential for impacts to those listed species that you supplied us with in our initial correspondence.

Please see the attached required project details. If you have any questions please do not hesitate to contact me.

Sincerely,
PRECISION ENGINEERING, LLC


Thom Kendall

RECEIVED

FEB 22 2018

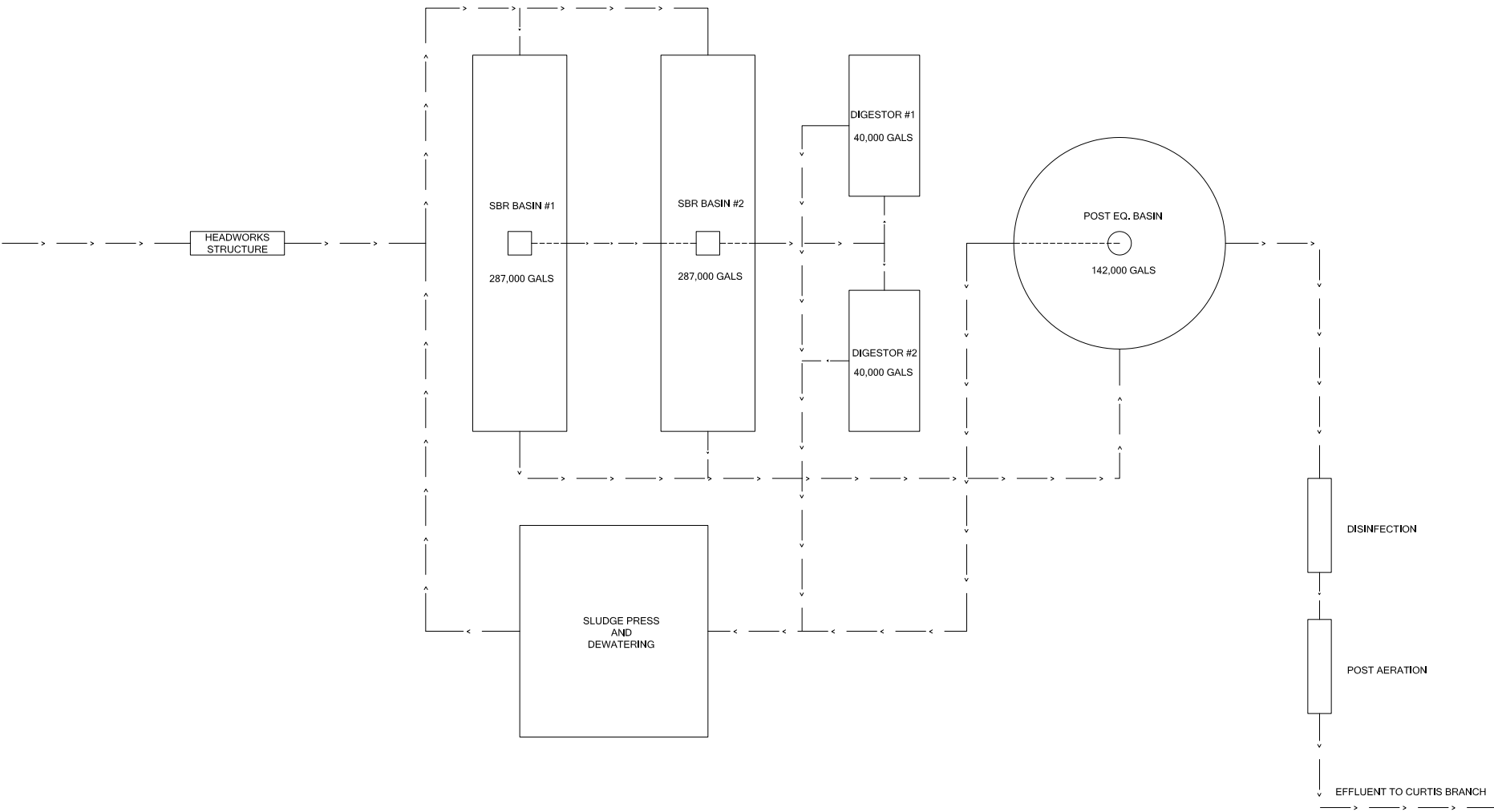
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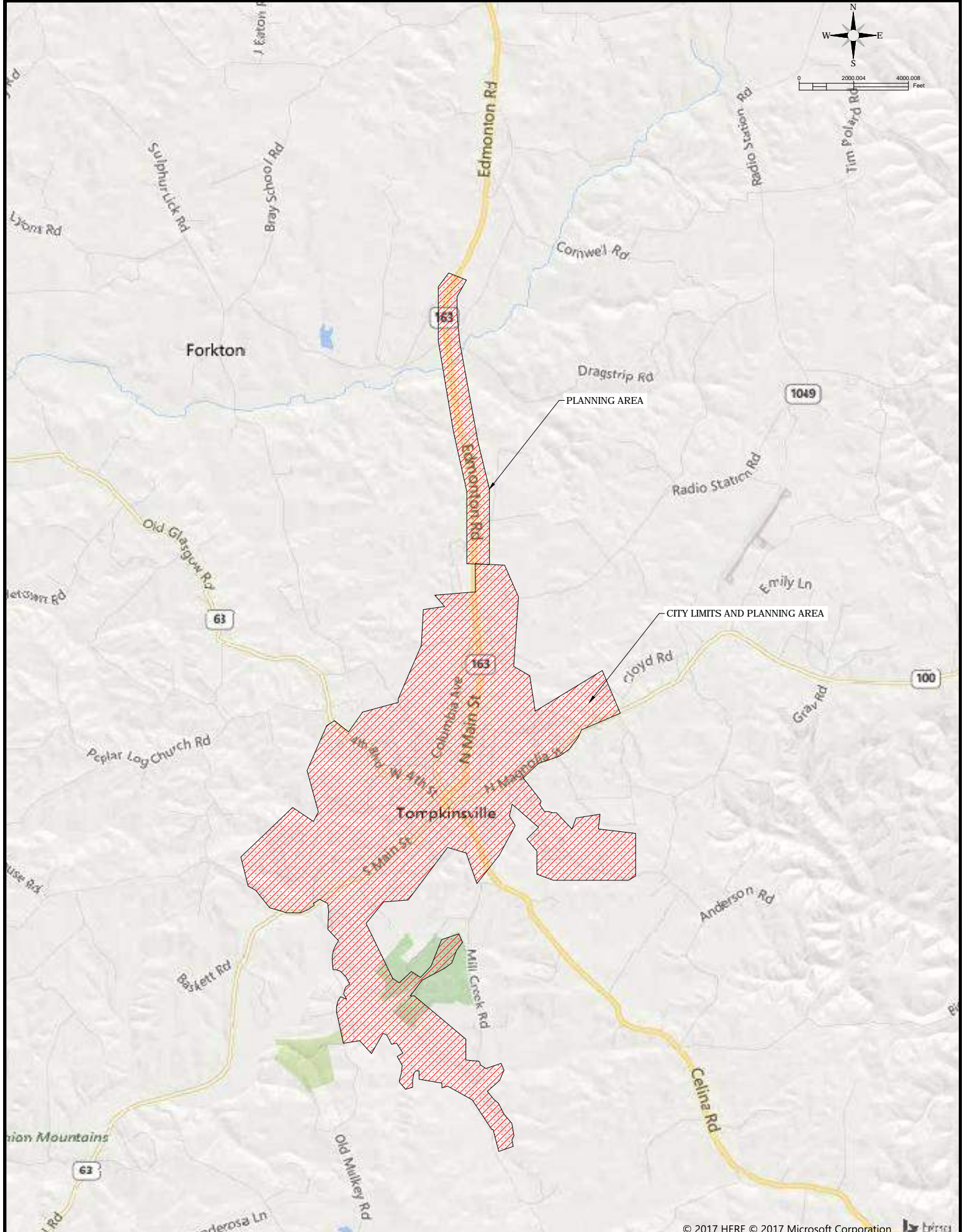
USFWS KYFO

APPENDIX B

TOMPKINSVILLE PLANNING AREA

0.800 MGD SBR WWTP PROCESS DESIGN DIAGRAM





DRAWN BY:	TS	REVISION	DESCRIPTION	DATE
REVIEWED BY:	SRH	1		
DATE:	12-6-17	2		
SCALE:		3		
PROJECT NO:		4		

CITY OF TOMPKINSVILLE
SEWER SYSTEM MAP

© 2017 HERE © 2017 Microsoft Corporation

**PRECISION**
ENGINEERING, LLC



DRAWN BY:	TB	REVISION	DESCRIPTION	DATE
REVIEWED BY:	SRH	1		
DATE:	12-6-17	2		
SCALE:		3		
PROJECT NO:		4		

CITY OF TOMPKINSVILLE
SEWER SYSTEM MAP



PRECISION
ENGINEERING, LLC

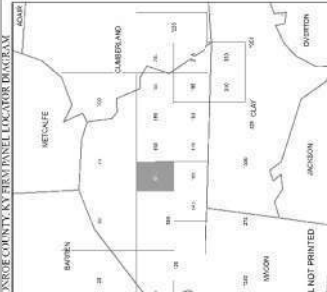
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Calculations on this map are referenced to the North American Vertical Datum of 1988. For information regarding the datum used, please refer to the same **vertical datum** for information regarding the datum used. For information regarding the datum used, please refer to the same **vertical datum** for information regarding the datum used.

13-33242
The current elevation, description, angle, location information for bench marks shown on the map please contact the Information Services Branch of the Canadian Geographic Survey or visit its website at <http://www.ccg.gc.ca>.
Map information was derived from multiple sources. Digital elevation data were obtained from the National Hydrographic Service (NHS) in 2008 at 10,000 x 10,000 m blocks with a 2-metre grid resolution. The topographic data were originally produced by the Geological Survey of Canada in 1976.
The shapefiles have been converted as a political boundary file used for road centreline selection in 2006 and political boundaries files derived from the National Geographic Network. Stream centrelines were extracted from the digital elevation model using the Watershed Boundary Analysis tool. Users of the map should be aware that river measurements are taken along the left bank.

[illegible]

For more information on available products associated with this FEMA visit the FEMA website at www.fema.gov. For more information on FEMA products, visit the FEMA website at www.fema.gov. For more information on FEMA products, visit the FEMA website at www.fema.gov. For more information on FEMA products, visit the FEMA website at www.fema.gov.



in cooperation with the Federal Emergency Management Agency (FEMA) and Kentucky's Division of Water in a digital statewide effort to assist communities in Kentucky. This flood insurance plan may well developed by FEMA and FEMA's National Flood Insurance Program (NFIP) to help with flood development in flood-prone areas. The State of Kentucky has been a long-term partner in floodplain management to reduce the risk of flooding. This is demonstrated by the fact that a commitment to map floodplains and floodplains is a key element of the state's floodplain management plan. It is working closely with FEMA as a Cooperating Technical Partner to help maintain this digital IFM.

[illegible][illegible]

ap is for use in administering the National Flood Insurance Program. It does not presently identify all areas subject to flooding, particularly from local size sources of small size. The community map repository should be updated for possible updated or additional flood hazard information.

ant more detailed information in areas where **Base Flood Elevations** and/or floodways have been determined. Users are encouraged to consult **Flow Profiles and Floodway Data Analysis Summary of Seawater Elevations** contained within the Flood Insurance Study (FIS) report that accompanies the FIR. Users should be aware that BFEs shown on the FIR represent mean high water conditions. These BFEs are intended for flood insurance rating and other post-emergency uses. The BFEs shown on the FIR should be used in conjunction with the FIR for purposes of construction and/or floodplain

values of the floodways were computed at cross sections and interpolated at cross sections. The floodways were listed on hydraulic contributions and on the requirements of the National Flood Insurance Program. Floodway boundaries are provided in the Flood Insurance Study report for this jurisdiction.

projection used in this map was Kaminsky State Plane
zone system (EPSG:1600). The Horizontal datum was NAD 83.
0 spheroid. Differences in datum, spheroid or projection used in the
creation of files for adjacent jurisdictions may result in slight positional
discrepancies in map features across jurisdiction boundaries. These differences do
not affect the accuracy of this EPSG

Calculations on this map are referenced to the North American Vertical Datum of 1988. For information regarding the vertical datum for information regarding the National Geodetic Survey website at www.ngs.noaa.gov or contact the National Geodetic Survey at the following:

Information Services
NINGS12
al Goodwin Sunde
3, 19262
East-West Highway
Spring, Maryland 20610-3262

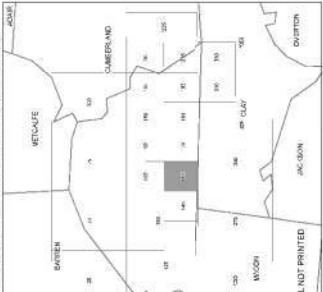
map information was derived from multiple sources. Data
 113342
 The current elevation, description, and/or location for each
 shown on this map, please contact the Information Services Branch of the
 Geomatics Survey at (501) 713-3262, or visit its website at
 www.gps.nola.gov.

Geographic Information (GEOG) These images were originally produced by the U.S. Geological Survey (USGS) and are available in a variety of formats. The USGS provides a variety of data and information on the Internet. The USGS provides a variety of data and information on the Internet. The USGS provides a variety of data and information on the Internet.

on updated geographic information, the map reflects more detailed and accurate information than the previous *Index for the Auditorium*. As a result, the *Index* contains more precise information about the location of the auditorium and the surrounding area. The *Index* also includes a new section on the *Index* titled "Auditorium and Surrounding Area" which provides information on the location of the auditorium and the surrounding area. The *Index* also includes a new section on the *Index* titled "Auditorium and Surrounding Area" which provides information on the location of the auditorium and the surrounding area. The *Index* also includes a new section on the *Index* titled "Auditorium and Surrounding Area" which provides information on the location of the auditorium and the surrounding area.

For more information on available products associated with this FEMA visit the FEMA Insurance Center website at <http://fema.gov>. Available products may vary by state and are subject to change. For more information on FEMA products, please visit the FEMA website at <http://fema.gov>. For more information on FEMA products, please visit the FEMA website at <http://fema.gov>.

INROE COUNTY, KY FIRM PANEL LOCATOR DIAGRAM



©



In cooperation with the Federal Emergency Management Agency (FEMA) and local communities in Kentucky, this Flood Insurance Rate Map was developed by the Kentucky Division of Water in a joint statewide effort to assist communities in efforts to minimize the loss of property and to assert effectively flood-prone areas for development in flood-prone areas. The State of Kentucky has implemented a long term approach to floodplain management to reduce the effects of flooding. This is demonstrated by the State's commitment to map flood-prone areas at the local level. As part of this effort, the Kentucky Division of Water is working closely with FEMA as a Cooperating Technical Partner to develop and release this Flood Insurance Rate Map.

[illegible][illegible]

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus its adjacent floodplain areas that must be kept open to the stream to ensure that the 1% annual chance flood can be carried without undue hazard to lives and property.

OTHER FLOOD AREAS

Areas of 1.2% annual chance flood; areas of 1% annual chance flood with depths of less than 1 foot or with drainage areas less than 1 square mile.

ZONE X

OTHER AREAS: AREAS DEEMED TO BE OUTSIDE THE 50% ANNUAL CHANGE THRESHOLD

LEGEND

 COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

 OTHERWISE PROTECTED AREAS (OPAs)

 AREAS WITH PROHIBITION OF DISCHARGES

CPDES allows and CPDs are normally located within or adjacent to Special Flood Hazard Areas.

2% annual chance floodplain boundary

0.2% annual chance floodplain boundary

 Floodway boundary
 Zone D boundary
 Boundary dividing Special Flood Hazard Areas of Chronic, Moderate, and Minimal Flood depths, or Flood velocities

CDSB and CDSB membership
 International, State, or County boundary
 Corporate, Environmental Jurisdiction, or Urban Growth boundary
 Road Not Included boundary

Referred to the North American Version Catalog of 1993

Cross section line A—A
 Trench line
 Geographic coordinates referenced to the North American Datum 1983 (NAD 83)
 87°07'45", 32°22'30"

500,000 FT

035580 X
● M15
Bench runs (and expansion in holes) to 14.5 mm sector of 11
power
Four files
Aqueous, Cubic, Fluor, Pentad, or 10 mm lower

None or the road bridge

Refer to listing of Map Reproducts on Map Index.

EFFECTIVE DATE OF COUNTY-WIDE
FLOOD INSURANCE RATE MAP
JULY 17, 2012

EFFECTIVE CARETAKING OF REVISIONS TO THIS PANEL

For currently registered business history units to participate in this survey, refer to the Contact Information table located in the Fund for the Future Study report for this jurisdiction.

To determine if flood insurance is available in your community, contact your insurance agent or the National Flood Insurance Program at 1-800-426-6250.

NFIP	PANEL 0165A
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FIRM FLOOD INSURANCE RATES

MONROE COUNTY,
FLOOD INSURANCE RATE IN

KENTUCKY
AND INCORPORATED ARE

PANEL 165 OF 350
(SEE LOCATOR DIAGRAM OR MAP
FOR FIRM PANEL LAYOUT)

COMMUNITY	NUMBER	PANEL
MEMPHIS, TN 381	755348	3185
HOUSTON, TX 77001	294023	3185

NI 90

007

EFFECTIVE DATE	MAP NUM
JULY 17, 2012	21171C0








State of Kentucky
Federal Emergency Management Agency

ap is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local size sources of small size. The community map repository should be updated for possible updated or additional flood hazard information.

ap is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local size sources of small size. The community map repository should be updated for possible updated or additional flood hazard information.

ant more detailed information in areas where **Base Flood Elevations** and/or floodways have been determined. Users are encouraged to consult **Flow Profiles and Floodway Data Analysis Summary of Seawater Elevations** contained within the Flood Insurance Study (FIS) report that accompanies the FIR. Users should be aware that BFEs shown on the FIR represent mean water-borne conditions. These BFEs are intended for flood insurance rating and other-borne conditions. The BFEs shown on the FIR should be used in conjunction with the FIR for purposes of construction and/or floodplain

ance of the floodways were computed at cross sections and interpolated at cross sections. The floodways were listed on hydraulic considerations and requirements of the National Flood Insurance Program. Floodway and other pertinent floodway data are provided in the Flood Insurance report for this jurisdiction.

analysis not in Special Flood Hazard Areas may be protected by the National Flood Insurance Program. The purpose of this study is to report the information on flood control structures for this area.

Calculations on this map are referenced to the North American Vertical Datum of 1988. These **vertical datums** must be converted to absolute sea level and noted on the map. For information regarding the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at www.ngs.noaa.gov or contact the National Geodetic Survey at the following:

Information Services
NHQ512
al Coedocis Surdy
-3, #9202
East-West Highway
Spring, Maryland 20915-3282

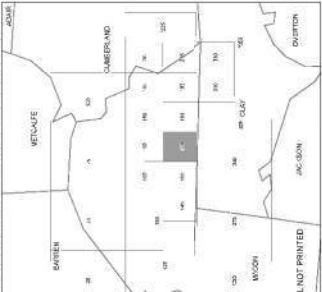
For current elevation, description, and/or location information for benchmarks shown on this map, please contact the Information Services Branch of the U.S. Geological Survey at (301) 713-2262, or visit its website at <http://www.ngs.noaa.gov>

map information was derived from multiple sources. Digital Elevation Model (DEM) data were obtained from the National Hydrographic Dataset (NHD) and the National Oceanic and Atmospheric Administration (NOAA). The NHD is a vector-based data set that provides information on the location and depth of the seafloor. The NOAA DEM is a raster-based data set that provides information on the elevation of the land surface. The DEM data were used to generate a bathymetric map of the study area. The bathymetric map was then used to generate a map of the study area showing the location of the study area and the location of the study area. The map of the study area was then used to generate a map of the study area showing the location of the study area and the location of the study area.

[illegible]

For more information on available products associated with this FEMA visit the FEMA Insurance Center website at <http://www.fema.gov>. Available products may vary by state and the Federal Emergency Management Agency's National Flood Insurance Program is not available in all states. FEMA's National Flood Insurance Program is not available in all states. FEMA's National Flood Insurance Program is not available in all states.

IN ROE COUNTY, KY FIRM PANEL LOCATOR DIAGRAM



cooperatively with the Federal Emergency Management Agency (FEMA) and communities in Kentucky. The Flood Insurance Rate Map was suspended by FEMA in 1979 because of the high cost of flood insurance. Through effective efforts to minimize the loss of property and the through effective use of the Flood Insurance Rate Map, the Kentucky Division of Water has been successful in obtaining a new Flood Insurance Rate Map for the state of Kentucky. This is demonstrated by the State's commitment to map the entire state of Kentucky with a Flood Insurance Rate Map by the year 2000. This is a major accomplishment for the Kentucky Division of Water. As part of this effort, the Kentucky Division of Water has been successful in obtaining a new Flood Insurance Rate Map for the state of Kentucky. This is demonstrated by the State's commitment to map the entire state of Kentucky with a Flood Insurance Rate Map by the year 2000. This is a major accomplishment for the Kentucky Division of Water.



State of Kentucky
Federal Emergency Management Agency

APPENDIX C

KPDES PERMIT, NOTICE OF VIOLATION & DMR DATA

**KENTUCKY POLLUTANT
DISCHARGE ELIMINATION
SYSTEM****PERMIT****PERMIT NO.:** KY0020702**AI NO.:** 3174**AUTHORIZATION TO DISCHARGE UNDER THE
KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM****Pursuant to Authority in KRS 224,**

City of Tompkinsville
206 N. Magnolia Street
Tompkinsville, Kentucky 42167

is authorized to discharge from a facility located at

Tompkinsville Wastewater Treatment Plant
323 Rockcrusher Road
Tompkinsville, Monroe County, Kentucky

to receiving waters named

Curtis Branch (Latitude 36°41'59" N & Longitude 85°42'24" W)

in accordance with effluent limitations, monitoring requirements and other conditions set forth in this permit.

This permit shall become effective on August 1, 2016.

This permit and the authorization to discharge shall expire at midnight, July 31, 2021.

June 9, 2016

Date Signed

Peter T. Goodman, Director
Division of Water

THIS KPDES PERMIT CONSISTS OF THE FOLLOWING SECTIONS.

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SECTION 1
EFFLUENT LIMITATIONS AND MONITORING
REQUIREMENTS

1. EFFLUENT AND MONITORING REQUIREMENTS

1.1. Compliance Monitoring Locations (Outfalls)

The following table lists the outfalls authorized by this permit, the latitude and longitude of each and the DOW assigned KPDES outfall number.

TABLE 1.					
No.	Treatment Provided	Latitude (N)	Longitude (W)	Receiving Waters	Description of Outfall
001	Screening Grit Removal Extended Aeration Sedimentation (Settling) Disinfection (Chlorine) Dechlorination Post Aeration Discharge to Surface Water Aerobic Digester	36°41'59"	85°42'24"	Curtis Branch	Domestic (Sanitary) Wastewater

1.2. Effluent Limitations and Monitoring Requirements

Beginning on the effective date and lasting through the term of this permit discharges from Outfall 001 shall comply with the effluent limitations.

TABLE 2.										
EFFLUENT LIMITATIONS									MONITORING REQUIREMENTS	
Effluent Characteristic	STORET Code	Units	Loadings (lbs/day)		Concentrations				Frequency	Sample Type
			Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum		
Flow, Effluent	50050	MGD	Report	Report	N/A	N/A	N/A	N/A	Continuous	Recorder
CBOD ₅ ¹ , Effluent	80082	mg/l	111.8	167.6	N/A	20.0	30.0	N/A	1/Week	24 Hr Composite ²
CBOD ₅ ¹ , Influent	80082	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Week	24 Hr Composite ²
CBOD ₅ ¹ , Percent Removal	80091	%	N/A	N/A	N/A	85	N/A	N/A	1/Month	Calculated ³
TSS, Effluent	00530	mg/l	167.6	251.5	N/A	30	45	N/A	1/Week	24 Hr Composite ²
TSS, Influent	00530	mg/l	N/A	N/A	N/A	Report	Report	N/A	1/Week	24 Hr Composite ²
TSS (Percent Removal)	81011	%	N/A	N/A	N/A	85	N/A	N/A	1/Month	Calculated ³
Ammonia (as mg/l NH ₃ N)										
May 1 – October 31	00610	mg/l	22.4	33.5	N/A	4.0	6.0 ⁴	N/A	1/Week	24 Hr Composite ²

TABLE 2.										
EFFLUENT LIMITATIONS									MONITORING REQUIREMENTS	
Effluent Characteristic	STORET Code	Units	Loadings (lbs/day)		Concentrations				Frequency	Sample Type
			Monthly Average	Maximum Weekly Average	Minimum	Monthly Average	Maximum Weekly Average	Maximum		
November 1 – April 30	00610	mg/l	55.9	83.8	N/A	10.0	15.0 ⁴	N/A	1/Week	24 Hr Composite ²
E. Coli ⁵	51040	#/100 ml	N/A	N/A	N/A	130 ⁶	240 ⁷	N/A	1/Week	Grab
Dissolved Oxygen	00300	mg/l	N/A	N/A	7.0	N/A	N/A	N/A	1/Week	Grab
pH	00400	SU	N/A	N/A	6.0	N/A	N/A	9.0	1/Week	Grab
Total Residual Chlorine	50060	mg/l	N/A	N/A	N/A	0.011	0.019 ⁴	N/A	1/Week	Grab
Total Phosphorus	00665	mg/l	N/A	N/A	N/A	Report	Report ⁴	N/A	1/Week	24 Hr Composite ²
Total Nitrogen ⁸	00600	mg/l	N/A	N/A	N/A	Report	Report ⁴	N/A	1/Week	24 Hr Composite ²
The Design Flow of the POTW is 0.67 MGD. The Average Annual Flow of the POTW is 0.468 MGD										
¹ CBOD ₅ – Carbonaceous Biochemical Oxygen Demand, 5-day										
² A 24-hour composite is a sample collected using an automated sampler set to collect equal volume aliquots of 120 to 140 mls each ever 15 minutes over a 24 hour period. The sample must be maintained at 6 °C at all times										
³ Percent Removal is calculated using the following equation: $\text{Percent Removal} = \left[\frac{(\text{Monthly Average Influent} - \text{Monthly Average Effluent})}{\text{Monthly Average Influent}} \right] \times 100$										
⁴ Daily Maximum										
⁵ E. Coli – Escherichia Coli Bacteria										
⁶ Thirty (30) day Geometric Mean										
⁷ Seven (7) day Geometric Mean										
⁸ Total Nitrogen is the summation of the analytical results for Total Nitrates, Total Nitrites, and Total Kjeldahl Nitrogen										

1.3. Standard Effluent Requirements

The discharges to waters of the Commonwealth shall not produce floating solids, visible foam or a visible sheen on the surface of the receiving waters.

1.4. Application Monitoring

POTWs are required to complete application Forms 1 and A which requires a minimum of 3 samples to be collected and analyzed. To ensure that sufficient samples are collected and analyzed DOW shall impose at a minimum annual sampling during years 2 through 4 of the permit term for those parameters required to

be analyzed and reported on the application. The results of the application monitoring shall be submitted on an annual DMR and summarized on the renewal application. The permittee shall report the No Discharge (NODI) 9 – Conditional Monitoring Not Required This Period for years 1 and 5 of the permit.

TABLE 3.						
Effluent Characteristic	STORET Code	Units	Concentrations		Frequency	Sample Type
			Average	Maximum		
Temperature (May 1- October 31)	00011	°F	Report	Report	3/5 years	Grab
Temperature (November 1- April 30)	00011	°F	Report	Report	3/5 years	Grab
Total Kjeldahl Nitrogen (TKN)	51449	mg/l	Report	Report	3/5 years	Grab
Nitrate Plus Nitrite Nitrogen	51450	mg/l	Report	Report	3/5 years	Grab
Oil & Grease	00552	mg/l	Report	Report	3/5 years	Grab
Phosphorus (Total)	00665	mg/l	Report	Report	3/5 years	Grab
Total Dissolved Solids (TDS)	70296	mg/l	Report	Report	3/5 years	Grab

SECTION 2

COLLECTION SYSTEM REQUIREMENTS

2. Collection System Requirements

2.1. Prohibitions

The following prohibitions apply to the collection system and its users:

- 1) There shall be no sanitary sewer overflows (SSOs);
- 2) No user shall introduce any pollutant or pollutants that will cause pass through or interference with the operation of the POTW and the collection system; or
- 3) No user shall introduce any of the following pollutants:
 - a. Pollutants which create a fire or explosion hazard, including but not limited to, wastestreams with a closed cup flashpoint of less than 140 °F (60 °C);
 - b. Pollutants which will cause corrosive structural damage or have a pH less than 5.0 standard units unless the POTW is designed to accommodate such pH levels;
 - c. Solid or viscous pollutants in amounts that would obstruct the flow to the POTW thus resulting in interference;
 - d. Any pollutant released in a discharge at such a volume or strength as to cause interference in the POTW;
 - e. Heat in such quantities that the temperature at the POTW treatment plant exceeds 104 °F (40 °C) unless the POTW requests and the Approval Authority grants alternate temperature limits;
 - f. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass-through;
 - g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and,
 - h. Any trucked or hauled waste except, at discharge points designated by the POTW

All POTW's, in cases where pollutants contributed by user(s) of the collection system are likely to result in reoccurring interference or pass-through, shall develop and enforce specific effluent limits for industrial user(s), and all other users, as appropriate, which, together with appropriate changes in the POTW treatment plant's facilities or operation, are necessary to ensure renewed and continued compliance with the POTW's KPDES permit or sludge use or disposal practices. POTW's with approved Pretreatment Programs meet this requirement.

2.2. Capacity, Management, Operation and Maintenance (CMOM) Program

2.2.1. Applicability

These conditions apply to all permittees with sewage infrastructure including the sewer system and wastewater treatment plant.

2.2.2. Goals

The goals of a comprehensive CMOM Program are:

- 1) To better manage, operate, and maintain the collection system;
- 2) Investigate capacity constrained areas of the collection system;
- 3) Proactively prevent or minimize SSOs;
- 4) Respond to SSO events; and
- 5) Proactively prevent or minimize the potential for the release of pollutants from ancillary activities through plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from storage areas.

To achieve these goals permittee shall complete a CMOM self-assessment using the checklist in the "Guide for Evaluating Capacity, Management, Operation, and Maintenance (CMOM) Programs at Sanitary Sewer Collection Systems," EPA 305-B-05-002 to determine the scope of the CMOM program.

The guide is available at: http://www.epa.gov/npdes/pubs/cmom_guide_for_collection_systems.pdf.

Upon completion of the checklist the permittee shall develop a proposed plan of action to achieve the goals of the CMOM program.

2.2.3. CMOM Plan

At a minimum the plan of action shall include the following:

- 1) Self-Assessment Summary (including recommended improvements and schedules);
- 2) Collection System Diagram;
- 3) Sewer Overflow Response Protocol (SORP);
- 4) Best Management Practices (BMPs); and
- 5) Any other constituent programs necessary to achieve the goals of the CMOM program (See <http://www.epa.gov/region04/water/wpeb/momproject/documents/r4prgguide.pdf> for additional guidance)

2.2.4. Collection System Diagram

The collection system diagram shall include the following:

- 1) Scale;
- 2) North arrow;
- 3) Date the map was drafted and most recent revision;
- 4) Street names;
- 5) Surface waters;
- 6) Service area boundaries;
- 7) Manholes and other access points (including structure IDs);
- 8) Sewer lines;
- 9) Pump stations (including structure IDs);
- 10) Wastewater treatment plants;
- 11) Permitted discharge points or outfalls (including CSO outfalls);
- 12) CSO regulators, for combined sewer systems; and
- 13) Locations of recurring SSOs that occurred within the last five (5) years prior to the effective date of this permit.

2.2.5. Sewer Overflow Response Protocol (SORP)

At a minimum the SORP shall include the following elements:

- 1) An overflow response procedure including designated responders for the permittee, response times, and cleanup methods;
- 2) A public advisory procedure;
- 3) A regulatory agency notification procedure.;
- 4) A manhole and pump station inspection schedule;
- 5) A procedure for addressing discharges to buildings caused by blockage, flow condition, or other malfunction in sewer infrastructure owned or operationally-controlled by the permittee; and
- 6) A requirement to include the structure ID for reported incidents.

2.2.6. Best Management Practices (BMPs)

BMPs are schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in Section 2.1 of this permit. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.

2.2.7. Implementation

Implementation shall be as soon as possible, but no later than one year from the effective date of the permit or as specified in the schedule of compliance for this permit.

2.2.8. Documentation

The permittee shall maintain all applicable CMOM program documents at the facility and make them available upon request to EEC personnel. Initial copies and modification thereof shall be sent to DOW upon request.

2.2.9. Modification

The permittee shall amend CMOM Programs documentation whenever there is a change in the facility or change in operation of the facility which materially affects the requirements specified in applicable documents.

2.2.10. Modification for Ineffectiveness

If any of the CMOM programs prove to be ineffective in achieving the general objective of preventing and eliminating SSOs and other unauthorized discharges, the permit, and/or specific CMOM programs shall be subject to modification to address deficiencies. If at any time following the issuance of this permit any of the CMOM programs are found to be inadequate pursuant to a state or federal site inspection or review, affected CMOM program documents shall be modified to incorporate such changes necessary to resolve concerns.

SECTION 3

STANDARD CONDITIONS

3. STANDARD CONDITIONS

3.1. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of KRS Chapter 224 and is grounds for enforcement action; for permit termination, revocation and reissuance, modification, or denial of a permit renewal application. Any person who violates applicable statutes, who fails to perform any duty imposed, or who violates any determination, permit, administrative regulation, or order of the cabinet promulgated pursuant thereto shall be liable for a civil penalty as provided at KRS 224.99.010.

3.2. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit.

3.3. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3.4. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

3.5. Proper Operation and Maintenance

The permittee shall at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

3.6. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, notification of planned changes or anticipated noncompliance does not stay any permit condition.

3.7. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

3.8. Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Director upon request, copies of records required to be kept by this permit.

3.9. Inspection and Entry

The permittee shall allow the Director or an authorized representative (including an authorized contractor acting as a representative of the Director), upon presentation of credentials and other documents as may be required by law, to:

(1) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by KRS 224, any substances or parameters at any location.

3.10. Monitoring and Records

(1) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(2) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities which shall be retained for a period of at least five (5) years (or longer as required by 401 KAR 5:065, Section 2(10)), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

(3) Records of monitoring information shall include:

- (i) The date, exact place, and time of sampling or measurements;
- (ii) The individual(s) who performed the sampling or measurements;
- (iii) The date(s) analyses were performed;
- (iv) The individual(s) who performed the analyses;
- (v) The analytical techniques or methods used; and
- (vi) The results of such analyses.

(4) Monitoring must be conducted according to test procedures approved under 401 KAR 5:065, Section 2(8) unless another method is required under 401 KAR 5:065, Section 2(9) or (10).

(5) KRS 224.99-010 provides that any person who knowingly violates KRS 224.70-110 or other enumerated statutes, or who knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, shall be guilty of a Class D felony and, upon conviction, shall be punished by a fine of not more than \$25,000, or by imprisonment for not more than one (1) year, or both. Each day upon which a violation occurs shall constitute a separate violation.

3.11. Signatory Requirement

(1) All applications, reports, or information submitted to the Director shall be signed and certified pursuant to 401 KAR 5:060, Section 4.

(2) KRS 224.99-010 provides that any person who knowingly provides false information in any document filed or required to be maintained under KRS Chapter 224 shall be guilty of a Class D felony and upon conviction thereof, shall be punished by a fine not to exceed twenty-five thousand dollars (\$25,000), or by imprisonment, or by fine and imprisonment, for each separate violation. Each day upon which a violation occurs shall constitute a separate violation.

3.12. Reporting Requirements

3.12.1. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- (i) The alteration or addition to a permitted facility, may meet one of the criteria for determining whether a facility is a new source in KRS 224.16-050; or
- (ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under KRS 224.16-050; or
- (iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

3.12.2. Anticipated Noncompliance

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3.12.3. Transfers

This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under KRS 224; see 401 KAR 5:070, Section 5; in some cases, modification or revocation and reissuance is mandatory.

3.12.4. Monitoring Reports

Monitoring results shall be reported at the intervals specified elsewhere in this permit.

- (i) Monitoring results must be reported on a DMR or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices.
- (ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 401 KAR 5:065, Section 2(8), or another method required for an industry-specific waste stream under 401 KAR 5:065, Section 2(9) or (10), the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.
- (iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

3.12.5. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit, shall be submitted no later than fourteen (14) days following each schedule date.

3.12.6. Twenty-four Hour Reporting

- (i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- (ii) The following shall be included as information which must be reported within twenty-four (24) hours under this paragraph:
 - (A) Any unanticipated bypass which exceeds any effluent limitation in the permit.
 - (B) Any upset which exceeds any effluent limitation in the permit.
 - (C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within twenty-four (24) hours.

(iii) The Director may waive the written report on a case-by-case basis for reports under paragraph ii of this section if the oral report has been received within twenty-four (24) hours.

3.12.7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Sections 3.12.1, 3.12.4, 3.12.5 and 3.12.6, at the time monitoring reports are submitted. The reports shall contain the information listed in Section 3.12.6.

3.12.8. Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Director, it shall promptly submit such facts or information.

3.13. Bypass

3.13.1. Definitions

- (i) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
- (ii) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

3.13.2. Bypass Not Exceeding Limitations

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Section 3.13.1.

3.13.3. Notice

- (i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, and if possible at least ten days before the date of the bypass.
- (ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Section 3.12.6.

3.13.4. Prohibition of Bypass

- (i) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:
 - (A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (C) The permittee submitted notices as required under Section 3.13.3.
- (ii) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the conditions listed above in Section 3.13.3.

3.14. Upset**3.14.1. Definition**

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

3.14.2. Effect of an Upset

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations, if the requirements of Section 3.14.3 are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

3.14.3. Conditions Necessary for a Demonstration of Upset

A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (i) An upset occurred and that the permittee can identify the cause(s) of the upset;
- (ii) The permitted facility was at the time being properly operated;
- (iii) The permittee submitted notice of the upset as required in Section 3.12.6; and
- (iv) The permittee complied with any remedial measures required under Section 3.4.

3.14.4. Burden of Proof

In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

SECTION 4

OTHER CONDITIONS

4. OTHER CONDITIONS

4.1. Schedule of Compliance

The permittee shall attain compliance with all requirements of this permit on the effective date of this permit unless otherwise stated below:

4.2. Other Permits

This permit has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal, and local agencies.

4.3. Continuation of Expiring Permit

This permit shall be continued in effect and enforceable after the expiration date of the permit provided the permittee submits a timely and complete application in accordance with 401 KAR 5:060, Section 2(4).

4.4. Antidegradation

For those discharges subject to the provisions of 401 KAR 10:030 Section 1(3)(b)5, the permittee shall install, operate, and maintain wastewater treatment facilities consistent with those identified in the approved regional facility plan.

4.5. Reopener Clause

This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved in accordance with 401 KAR 5:050 through 5:080, if the effluent standard or limitation so issued or approved:

- 1) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- 2) Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of KRS Chapter 224 when applicable.

4.6. Sludge Disposal

The disposal or final use of sewage sludge generated during the treatment of domestic sewage by a POTW shall be disposed of in accordance with state and federal requirements [401 KAR Chapter 45 and 40 CFR 503].

4.7. Certified Operators

The wastewater treatment plant shall be under the primary responsibility of Class II Wastewater Treatment Plant Certified Operators or higher.

The collection system shall be under the primary responsibility of Class II Collection System Certified Operators or higher.

4.8. Outfall Signage

The KPDES permit establishes monitoring points, effluent limitations, and other conditions to address discharges from the permitted facility. In an effort to better document and clarify these locations the permittee should place and maintain a permanent marker at each of the monitoring locations.

SECTION 5

MONITORING AND REPORTING REQUIREMENTS

5. MONITORING AND REPORTING REQUIREMENTS

5.1. KPDES Outfalls

Discharge samples and measurements shall be collected at the compliance point for each KPDES Outfall identified in this permit. Each sample shall be representative of the volume and nature of the monitored discharge.

5.2. Monthly Operating Reports (MORs)

In addition to the monitoring of effluent as specified by the permit, the permittee shall conduct process control monitoring on a daily basis. Process control monitoring is that monitoring performed by the operators of the wastewater treatment plant to determine if the wastewater system is operating at its optimum efficiency. This monitoring includes but is not limited to influent and effluent quality and quantity monitoring, chemical usage, sludge monitoring including volume produced, wasted, and disposed, and monitoring of internal units such as aeration basins and oxidation ditches.

The data shall be recorded using the Microsoft EXCEL-based Monthly Operating Report (MOR) workbook available of the Department for Environmental Protection's Forms webpage at:

<http://dep.ky.gov/formslibrary/Pages/default.aspx>

The updated workbook shall be maintained on-site and made available upon request by Cabinet personnel.

5.3. Sufficiently Sensitive Analytical Methods

Analytical methods utilized to demonstrate compliance with the effluent limitations established in this permit shall be sufficiently sensitive to detect pollutant levels at or below the required effluent limit. It is the responsibility of the permittee to demonstrate compliance with permit parameter limitations by utilization of sufficiently sensitive analytical methods.

5.4. Certified Laboratory Requirements

All laboratory analyses and tests required to demonstrate compliance with the conditions of this permit shall be performed by EEC certified general wastewater laboratories.

5.5. Submission of DMRs

Monitoring results obtained during each monitoring period must be reported. The completed DMR for each monitoring period must be submitted no later than the 28th day of the month following the monitoring period for which monitoring results were obtained.

The completed DMR for each monitoring period must be entered into the DOW approved electronic system no later than midnight on the 28th day of the month following the monitoring period for which monitoring results were obtained.

For more information regarding electronic submittal of DMRs, please visit the Division's website at: <http://water.ky.gov/permitting/Pages/netDMRInformation.aspx> or contact the DMR Coordinator at (502) 564-3410.

TOMPKINSVILLE WASTEWATER PLANT MONTHLY OPERATING REPORT FEBRUARY 2018

COUNTY MONROE

DATE	DAY	FLOW	RAINFALL	TSS	BOD	DISSOLVED OXYGEN	SSV 30/60	MLSS	MLVSS	SVI	TCR	AMMONIA N.	PHOSPHORUS	E - Coil	SLUDGE WASTED	CHEMICALS USED	Total N.	PH	TEMP.		
Month/Year	WK	MGD	INCHES	MG/L	MG/L	MG/L	M/L	MG/L	MG/L	0%	MG/L	MG/L	MG/L	EFF	GALLONS X 1000	CL	PPD	SO2	MG/L	S.U.	C.
FEB.2018		INF	EFF	INF	INF	A.T. #1	A.T. #2	EFF	A.T.		CCT	EFF	INF	EFF	INF	EFF	COL/100ML	DIGESTER			
FEB. 01	T	0.436	0.983	.2"	87	9.1	110	0	9.2	9.2	11.6										
FEB. 02	F	0.64	0.478																		
FEB. 03	S	0.64	0.478																		
FEB. 04	S	0.64	0.478	.4"																	
FEB. 05	M	0.666	0.477																		
FEB. 06	T	1.051	0.666			10.3	9.2	11.6													
FEB. 07	W	1.366	1.205	1.5		10	9.2	11.2	45	32											
FEB. 08	T	0.973	0.677		46.5	100	26	33	7.5	7.2	10.4	25	20								
FEB. 09	F	1.323	1.32																		
FEB. 10	S	1.323	1.32																		
FEB. 11	S	1.323	1.32	4.5																	
FEB. 12	M	1.436	1.149																		
FEB. 13	T	1.183	0.812			11.3	10	10.9													
FEB. 14	T	1.183	0.812			11.1	10.6	11.2													
FEB. 15	W	1.289	0.903	.4"		9.6	9.9	11.2	25	20											
FEB. 16	T	1.17	0.767	.4"	49.7	12	36	9	9.2	9.9	10.6										
FEB. 17	F	1.366	1.021																		
FEB. 18	S	1.366	1.021	1"		9.2	9.9	10.2	25	20											
FEB. 19	S	1.366	1.021																		
FEB. 20	M	1.037	0.666			9.6	9	11.2	25	20											
FEB. 21	T	0.841	0.563			9.2	10	10.4	28	23	346										
FEB. 22	W	1.245	0.922	1"		9.2	7.6	10.9													
FEB. 23	T	1.366	1.017		76.7	9.9	56	0	10.2	8	9.5	18	15								
FEB. 24	F	1.38	1.096																		
FEB. 25	S	1.38	1.096			10.1	8.2	9.6													
FEB. 26	S	1.38	1.096	2"																	
FEB. 27	M	1.281	0.875																		
FEB. 28	T	1.033	0.672			10.2	9	10.1	18	15											
FEB. 29	T	1.033	0.672			10.3	9.2	10.2													
FEB. 30	W	1.264	0.922																		
TOTAL		31.793	24.57	11.5	260	133	218	36													
AVERAGE		1.135	0.877		65	33	55	9													
MAXIMUM		1.436	1.096		87	100	110	33	11.1	10.6	10.4	45	32								
MINIMUM		0.436	0.363		46.5	9.1	36	0	7.5	7.6	9.5	18	15								

OPERATOR CERTIFACATION #16382

TOMPKINSVILLE WASTEWATER PLANT MONTHLY OPERATING REPORT JANUARY 2018

DATE	DAY	FLOW	RAINFALL	TSS	BOD	DISSOLVED OXYGEN	SSV 30/60	MLSS	MLVSS	SVI	TCR	AMMONIA N.	PHOSPHORUS	E - Coil	SLUDGE WASTED	CHEMICALS USED	Total N.	PH	TEMP.			
Month/year	WK	MGD	INCHES	MG/L	MG/L	MG/L	M/L	MG/L	MG/L	%	MG/L	MG/L	MG/L	EFF	GALLONS X 1000	CL	PPD	MG/L	S.U.	C.		
January 16		INF	EFF	INF	EFF	INF	A.T.	A.T.	A.T.	A.T.	CCT	INF	EFF	EFF	DIGESTER		SO2	EFF	INF	EFF		
Jan .01	M	0.379	0.314													8	9		7	7.2	14	13
Jan .02	T	0.501	0.368			9.3	9.2	10.3	84	45	560					8	9		7.2	7.3	12	11
Jan .03	W	0.4	0.311			9.1	9.2	10.7			0.39	0.065				8	9		7.2	7.3	12	11
Jan .04	T	0.294	0.268	167	5.9	153	0	6.6	9	11.1	50	35		15		8	9	12	7.3	7.4	11	11
Jan .05	F	0.286	0.256			12.2	11.6	13.3			0.38					6	9		7.3	7.3	12	11
Jan .06	S	0.286	0.266													8	9					
Jan .07	S	0.286	0.259	.4"												6	9					
Jan .08	M	0.403	0.321			9.2	8.9	13	71	50	0.41					8	9		7.2	7.3	13	13
Jan .09	T	0.392	0.314			9.1	8.6	11.4			0.38					6	9		7.1	7.3	13	14
Jan .10	W	0.36	0.296			6.1	5.7	11.4	59	40	0.21	0.019				8	9		7.3	7.2	14	14
Jan .11	T	0.393	0.303	61	5.6	120	0	6.1	8.3	11.3	0.73		0	4.14	1.5	6	9	14	7.7	7.4	14	15
Jan .12	F	0.329	0.29	.3"												8	9					
Jan .13	S	0.329	0.29													6	9					
Jan .14	S	0.329	0.29													8	9					
Jan .15	M	0.329	0.29													8	9					
Jan .16	T	0.239	0.249	3" sn		11.1	12	13.3	70	50	0.74					8	9		7.4	7.4	12	12
Jan .17	W	0.261	0.254			11.8	12	13.1			0.39	0.008				6	9		7.5	7.4	11	10
Jan .16	T	0.287	0.26	69	7	64	0	11.2	11.4	14.4	109	0.56	0.35	3.49	2.06	8	9	15	7.4	7.4	13	11
Jan .19	F	0.344	0.275			10.7	10.6	13.6			0.46					8	9		7.4	7.4	14	12
Jan .20	S	0.344	0.275													8	9					
Jan .21	S	0.344	0.275													8	9		7.4	7.4	13	14
Jan .22	M	0.467	0.363	.2"		6.8	6.5	11.6	55	45	0.32					8	9		7.3	7.3	13	13
Jan .23	T	0.408	0.335			10.3	9.2	11.4			0.77					8	9		7.3	7.3	13	13
Jan .24	W	0.35	0.296			10	9.4	11.1	60	40	0.74	0.001				8	9		7.1	7.3	13	14
Jan .25	T	0.356	0.278			9.8	9.3	10.6			0.45		0	4.49	1.84	8	9	14	7.3	7.3	13	13
Jan .26	F	0.536	0.402			9.2	9.4	10.2			0.62					8	9		7.1	7.2	13	14
Jan .27	S	0.536	0.402	1.9"												8	9					
Jan .26	S	0.536	0.402													8	9					
Jan .29	M	0.607	0.318			9.6	9.7	10.8	65	45	0.43					8	9		7.3	7.4	13	13
Jan .30	T	0.457	0.347			9.9	9.7	10.3			1					6	9		7.4	7.7	14	13
Jan .31	W	0.42	0.348			9.3	9.4	12.1	59	40	0.35	0.001				8	9		7.4	7.4	13	13
TOTAL		11.7	9.511	2.9	390	25	456	0			232		0.36	15.17	6.26	246	279	55				
AVERAGE		0.377	0.308		96	6.4	115	0			116		0.066	3.8	1.57			13.8				
MAXIMUM		0.536	0.402		167	5.6	84	0	12.2	11.6	123	1	0.021	0.35	4.49			15	7.7	7.7	14	15
MINIMUM		0.265	0.254		51	7	153	0	6.1	5.7	109	0.21	4.6	0	0.68			12	7.1	7.2	11	10

OPERATOR Rufus Hanner

OPERATOR CERTIFICATION#16382

DATE	DAY	FLOW	RAINFALL	TSS	BOD	DISSOLVED OXYGEN			SSV 30/60	MLSS	MLVSS	SVI	TCR	AMMONIA N.			PHOSPHORUS			E - Coil	SLUDGE WASTED	CHEMICAL'S USED			Total N.	PH	TEMP.	
Month/Year	WK	MGD	INCHES	MG/L	MG/L	MG/L	A.T. #1	A.T. #2	MG/L	A.T.	MG/L	A.T.	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	EFF	GALLONS X 1000	DIGESTER	CL	PPD	SO2	EFF	S.U.	C.
DEC.2017		INF	EFF	INF	EFF	INF	EFF	A.T. #1	A.T. #2	EFF	A.T.	A.T.	CCT	EFF	INF	EFF	INF	EFF	EFF									
DEC. 01	F	0.336	0.27					6.8	6.5	8.8			0.93										8	9	9			
DEC. 02	S	0.336	0.27																				8	9	9			
DEC. 03	S	0.336	0.27																				8	9	9		7.5	7.6
DEC. 09	M	0.499	0.379																				8	9	9		7.5	7.6
DEC. 09	M	0.499	0.379																				8	9	9		7.5	7.6
DEC. 10	T	0.727	0.53	1.4"									0.46										8	9	9		7.2	7.4
DEC. 06	W	0.464	0.368										0.46	0.011									8	9	9		7.2	7.4
DEC. 06	W	0.464	0.368										0.46	0.011									8	9	9		7.2	7.4
DEC. 09	T	0.414	0.324										0.93										8	9	9	13.3	7.3	7.5
DEC. 09	T	0.414	0.324										0.93										8	9	9		7.3	7.5
DEC. 09	F	0.357	0.304																				8	9	9		7.4	7.3
DEC. 09	F	0.357	0.304																				8	9	9			
DEC. 10	S	0.357	0.304																				8	9	9			
DEC. 10	S	0.357	0.304																				8	9	9		7.3	7.4
DEC. 01	M	0.382	0.291										1.4										8	9	9		7.2	7.1
DEC. 12	T	0.343	0.248										0.91										8	9	9		7.1	7.4
DEC. 13	W	0.364	0.291										113	1.4	0.009								8	9	9		7.1	7.4
DEC. 13	W	0.364	0.291										113	1.4	0.009								8	9	9	16	7.3	7.4
DEC. 09	T	0.336	0.284										1.3										8	9	9			
DEC. 10	F	0.295	0.291																				8	9	9			
DEC. 16	S	0.295	0.255																				8	9	9			
DEC. 17	S	0.295	0.255																				8	9	9			
DEC. 18	M	0.316	0.268										0.74										8	9	9		7.1	7.5
DEC. 18	M	0.316	0.268										0.74										8	9	9		7.3	7.4
DEC. 19	T	0.331	0.283										1.1	0.006									8	9	9		7.1	7.2
DEC. 19	T	0.331	0.283										0.59										8	9	9		7.1	7.2
DEC. 20	W	0.351	0.314	2"									0.74										8	9	9	16	7	7.2
DEC. 20	W	0.351	0.314	2"									0.74										8	9	9		7	7.2
DEC. 21	T	0.331	0.279										0.26										8	9	9		7.3	7.4
DEC. 22	F	1.04	0.874																				8	9	9			
DEC. 22	F	1.04	0.874																				8	9	9			
DEC. 23	S	1.04	0.874	3.5																			8	9	9			
DEC. 24	S	1.04	0.874																				8	9	9			
DEC. 25	M	1.04	0.874																				8	9	9			
DEC. 25	M	1.04	0.874																				8	9	9		7.4	7.4
DEC. 26	T	0.668	0.465										0.94										8	9	9		7.4	7.4
DEC. 26	T	0.668	0.465										0.94										8	9	9		7.4	7.4
DEC. 27	W	0.589	0.403										0.93	0.009									8	9	9		7.5	7.4
DEC. 27	W	0.589	0.403										0.93	0.009									8	9	9		7.1	7.2
DEC. 28	T	0.509	0.371										0.94										8	9	9		7.1	7.2
DEC. 28	T	0.509	0.371										0.94										8	9	9	8.1	7.1	7.1
DEC. 29	F	0.379	0.314																				232	261				
DEC. 29	F	0.379	0.314																									
DEC. 30	S	0.379	0.314																									
DEC. 30	S	0.379	0.314																									
DEC. 31	S	0.379	0.314																									
TOTAL		14.89	12.02	5.1																						53		
AVERAGE		0.48	0.388																							13.3		
MAXIMUM		1.04	0.874										1.1	0.011												16	7.7	7.5
MINIMUM		0.295	0.27										0.26	0.006												8.1	7	7.1

OPERATOR CERTIFICATION# 16382

TOMPKINSVILLE WASTEWATER PLANT MONTHLY OPERATING REPORT NOVEMBER, 2017

DATE	DAY	FLOW	RAINFALL	TSS	BOD	DISSOLVED OXYGEN	SSV 30/60	MLSS	MLVSS	SVI	TCR	AMMONIA N.	PHOSPHORUS	E - Coil	SLUDGE WASTED	CHEMICAL'S USED			Total N.	PH	TEMP.		
Month/Year	WK	MGD	INCHES	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	0%	MG/L	MG/L	MG/L	COL/100ML	GALLONS X 1000	CL	PPD	SO2	EFF	S.U.	C.		
Nov. 2017	INF	EFF	INF	EFF	EFF	A.T. #1	A.T. #2	EFF	A.T.	A.T.	CCT	INF	EFF	INF	EFF	CL	9			7.1	7.4	22	22
NOV. 01	W	0.472	0.334	.4"		6.1	5.7	7.2	27	23	0.39	0.007				8	9		13.5	7.2	7.3	22	22
NOV. 02	T	0.439	0.324		91	5.8	61	0	6.1	6.8	8					8	9			7.1	7.3	24	23
NOV. 03	F	0.411	0.304			6	8.5	7.8	27	23	0.36					8	9						
NOV. 04	S	0.411	0.304													6	9						
NOV. 05	S	0.411	0.304	.4"												6	9			7.2	7.3	20	20
NOV. 06	M	0.575	0.427	0.5		6	5.1	6	26	24	0.46	0.006				6	9			7.3	7.4	19	19
NOV. 07	T	0.569	0.435			6	4	7.8			0.43					6	9			7.2	7.4	18	18
NOV. 08	W	0.48	0.364			7.5	4.3	7.5	26	24	0.41					6	9		15.3	7.1	7.4	22	18
NOV. 09	T	0.407	0.304		79	12	64	0	7	4.9	7.4					6	9						
NOV. 10	F	0.407	0.304													8	9						
NOV. 11	S	0.407	0.304													6	9						
NOV. 12	S	0.407	0.304													8	9			7.4	7.5	18	17
NOV. 13	M	0.417	0.327			5.8	4.6	8	30	25	0.74				5	6	9		7.5	7.4	17	17	
NOV. 14	T	0.362	0.273			8.9	5.7	7.8			0.8					6	9		7.8	7.5	17	17	
NOV. 15	W	0.402	0.311			6.5	4.2	7.7	27	23	0.56	0.013				8	9		15.6	7.5	7.6	17	17
NOV. 16	T	0.377	0.289		42	7.1	60	2	6.4	4.2	7.6					6	9			7.6	7.8	16	17
NOV. 17	F	0.465	0.385			6.2	4.1	7.9	35	32	0.48					6	9						
NOV. 18	S	0.465	0.385	.7"												8	9			7.4	7.5	16	15
NOV. 19	S	0.465	0.385													6	9			7.2	7.6	17	16
NOV. 20	M	0.4	0.309			5.5					1	0.01			5	6	9		12.2	7.2	7.6	17	16
NOV. 21	T	0.389	0.314			6.3					0.88					8	9			7.4	7.4	17	16
NOV. 22	W	0.44	0.355				5.6				0.86					6	9						
NOV. 23	T	0.44	0.355													8	9						
NOV. 24	F	0.44	0.355													6	9						
NOV. 25	S	0.44	0.355													8	9						
NOV. 26	S	0.44	0.355													6	9			7.4	7.5	16	16
NOV. 27	M	0.348	0.279			6.9					0.59					8	9			7.6	7.5	16	16
NOV. 28	T	0.346	0.287			6.6					0.41					6	9			7.2	7.4	17	16
NOV. 29	W	0.351	0.276			6.4					0.35	0.013				8	9		15.5	7.6	7.4	16	16
NOV. 30	T	0.356	0.295		109	10	96	0	7		84	0.58					270						
TOTAL		12.74	8.904	2.01	421	52	392	2											63				
AVERAGE		0.425	0.33		84	10	78	0.04											12.6	7.6	7.6	22	22
MAXIMUM		0.575	0.427		109	17	96	2	7.5	7	8.9	40	34	478					18.3	7.1	7.3	15	15
MINIMUM		0.346	0.278		42	5.6	60	0	6	4	7.2	27	23	449					12.2				

OPERATOR 

OPERATOR CERTIFICATION #16382

DATE	DAY	FLOW		RAINFALL	TSS	BOD	DISSOLVED OXYGEN		SSV 30/60	MLSS	MLVSS	SVI	TCR	AMMONIA N.		PHOSPHORUS		E - Coil	SLUDGE WASTED	CHEMICALS USED		Total N.	PH		TEMP.		
Month/Year	WK	MGD	EFF	INCHES	MG/L	MG/L	A.T. # 1	A.T. # 2	ML/L	MG/L	MG/L	%	MG/L	MG/L	MG/L	EFF	COL/100ML	GALLONS X 1000	CL	PPD	SO2	MG/L	S.U.	INF	EFF	INF	EFF
Oct.2017		INF	EFF		INF	EFF	INF	EFF	A.T.	A.T.	A.T.	A.T.	CCT	EFF	INF	EFF	INF	EFF									
Oct.01	S	0.337	0.248																8	9				6.6	7	22	22
Oct.02	M	0.351	0.251				5.5	4.6	7.6	22	20		0.62						8	9				6.9	7.1	24	23
Oct.03	T	0.347	0.248				6.1	5.8	7.6				0.55					5	8	9				6.9	7.1	23	24
Oct.04	W	0.357	0.238				5.6	5.3	7.2	24	21		0.75	0.001					8	9				7	7.1	23	24
Oct.05	T	0.349	0.252		114	18	59	0	5.8	6.1	7.5		0.6		1.3	1.84	2.08	31	8	9			20.7	7	7.1	25	24
Oct.06	F	0.472	0.336				5.5	6.2	7.2	22	20		0.55						8	9				7	7.2	24	23
Oct.07	S	0.472	0.336																8	9							
Oct.08	S	0.472	0.336	1.4"															8	9				7	7.1	22	23
Oct.09	M	0.417	0.292				5.7	4.9	7	24	20		0.55					5	8	9				6.7	7.1	23	24
Oct.10	T	0.42	0.301				5.5	4.6	7.2				0.53						8	9				7	7.1	23	24
Oct.11	W	0.373	0.292				5.7	4.9	7.2	25	20		0.5	0.001					8	9				7	6.9	22	22
Oct.12	T	0.386	0.292		140	18	109	5	6	5.1	7.6		0.41		0.39	2.86	2.06	76	8	9			18.2	7	6.9	22	22
Oct.13	F	0.372	0.292				5.3	4.9	7.4	24	21		0.52						8	9				6.7	7	22	24
Oct.14	S	0.372	0.292																8	9							
Oct.15	S	0.372	0.282	.4"															8	9				6.5	6.7	22	23
Oct.16	M	0.386	0.292				5.4	4.7	7.6	22	21		0.55						8	9				6.6	6.7	24	22
Oct.17	T	0.355	0.293				5.6	4.9	7.2				0.62						8	9				6.6	6.7	22	21
Oct.18	W	0.348	0.26				6.2	4.2	7.6	25	22	453	0.6	0.001					8	9				6.6	6.7	22	23
Oct.19	T	0.34	0.245		50	29	82	5	5.7	5	7.6		0.55		0.53	2.86	2.3	25	8	9			20.4	6.6	6.7	22	23
Oct.20	F	0.408	0.296				5.5	4.5	7.4				0.55						8	9				6.7	6.8	22	23
Oct.21	S	0.408	0.296																8	9							
Oct.22	S	0.408	0.296																8	9							
Oct.23	M	0.807	0.471	1.4"			6	4.2	7.3	16	13		0.21						8	9				6.4	6.5	22	21
Oct.24	T	0.433	0.317				5.5	5	7.2				0.3						8	9				6.8	6.8	20	21
Oct.25	W	0.386	0.296				5.5	4.5	7.6	25	22		0.64	0.006					8	9				6.6	6.7	22	22
Oct.26	T	0.386	0.277				5.8	5.5	7.8				0.57		0	2.22	1.62	63	8	9			19.1	6.6	6.7	22	22
Oct.27	F	0.702	0.518		70	18	54	0	5.8	5.5	7.8		0.55						8	9				6.6	6.7	23	22
Oct.28	S	0.702	0.518																8	9							
Oct.29	S	0.702	0.518																8	9							
Oct.30	M	0.451	0.326				4.6	6.2	8	22	20		1.2						8	9				7.3	7.3	19	18
Oct.31	T	0.432	0.318				6	6.3	7.6				0.39					5	8	9				7.2	7.5	19	20
TOTAL		13.46	9.798	3.2	374	81	136	5					0.015		2.22	9.76	8.07		248	279			78.4				
AVERAGE		0.434	0.316		93.5	20	34	5					0.004		0.56	2.4	2.02	44				19.6					
MAXIMUM		0.807	0.518		140	29	109	0	6.1	6.7	8	25	1.2	0.001	1.3	2.86	2.08	25				20.7	7.3	7.5	25	24	
MINIMUM		0.337	0.238		50	15	54	0	4.6	4.2	7	16	0.21	0.001	0	1.84	1.62	76				18.2	6.4	6.5	19	18	

OPERATOR 

OPERATOR CERTIFICATION #16382

DATE	DAY	FLOW	RAINFALL	TSS	BOD	DISSOLVED OXYGEN	SSV 30/60	MLSS	MLVSS	SVI	TCR	AMMONIA N.	PHOSPHORUS	E - Coil	SLUDGE WASTED	CHEMICALS USED	Total N.	PH	TEMP.		
Month/year	WK	MGD	INCHES	MG/L	MG/L	MG/L	ML/L	MG/L	MG/L	%	MG/L	MG/L	MG/L	COL/100ML	GALLONS X 1000	CL	PPD	SO2	EFF	S.U.	C.
Sept.2017		INF	EFF	INF	EFF	INF	EFF	A.T.# 1	A.T.# 2	EFF	A.T.	A.T.	A.T.								
SEPT.01	F	1.067	0.769	4.6"				6.3	6.4	7.9	15	13				8	9			7.2	7.3
SEPT.02	S	1.067	0.769													8	9				
SEPT.03	S	1.067	0.769													8	9				
SEPT.04	M	0.694	0.43													8	9				
SEPT.05	T	0.976	0.662	1"			6.6	6.3	8.1	22	20	0.36		0.33	2.07	1.12	27		10.8	7.2	7.1
SEPT.06	W	0.877	0.449	69	13	49	6.6	7.3	8.3			0.43				8	9		6.9	7.4	23
SEPT.07	T	0.533	0.337				6.3	6.5	8.4			0.46	0.004			8	9		7	7.4	23
SEPT.08	F	0.439	0.299				6.4	6.9	7.9	22	20	0.63				8	9		7.1	7.2	22
SEPT.09	S	0.439	0.299													8	9				
SEPT.10	S	0.439	0.299													8	9				
SEPT.01	M	0.492	0.332				6.6	6	7.9	25	22	4.28		68	0.73				7.3	7.1	23
SEPT.12	T	0.497	0.344	6"			6.6	6.5	7.9			0.63		0.63		8	9		16	7	7.2
SEPT.15	W	0.543	0.386				6.2	6.5	8.1	24	21	0.43	0.01		6	8	9		6.9	7.3	21
SEPT.14	T	0.466	0.332	93	19	93	6.7	6.1	7.9			0.54		0.54		8	9		7.5	7.3	21
SEPT.16	F	0.364	0.299				6.1	6.3	7.3	23	20	0.46		0.46		8	9		7.1	7.3	23
SEPT.16	F	0.364	0.299				6.1	6.3	7.3	23	20	0.46		0.46		8	9				
SEPT.16	S	0.389	0.299													8	9				
SEPT.17	S	0.389	0.299													8	9				
SEPT.18	M	0.406	0.278				4.9	6.4	7.3	24	21	0.36		0.36		8	9		7.3	7.4	23
SEPT.16	T	0.387	0.287				6.4	6.3	7.4			0.37		0.37		8	9		7.2	7.4	23
SEPT.15	T	0.387	0.287				6.4	6.3	7.4			0.37		0.37		8	9		7.2	7.3	24
SEPT.20	W	0.402	0.277				6.6	4.4	7.3	23	20	0.49	0.009			8	9		7.2	7.4	24
SEPT.01	T	0.377	0.299	108	12	88	4.7	6.5	7.9			0.46		0.46		8	9		19	7.2	7.4
SEPT.23	F	0.364	0.262				4.9	6.5	7.2	24	21	0.61		0.61		8	9		7.1	7.4	25
SEPT.23	S	0.364	0.262													8	9				
SEPT.27	S	0.364	0.262													8	9				
SEPT.26	M	0.371	0.262				4.8	4.4	7.2	24	21	4.80		50	0.66	8	9		7.4	7.4	24
SEPT.26	T	0.366	0.261				4.9	6.5	7.1			0.4		0.4		8	9		7.2	7.4	24
SEPT.27	W	0.382	0.278				4.8	4.9	7.1			0.69	0.001			8	9		6.9	7.1	25
SEPT.23	T	0.364	0.266	104	10	120	4.9	4.7	7			0.46		0.46		8	9		21.2	6.9	7
SEPT.29	F	0.337	0.248				4.9	4.9	7	23	19	0.63		0.63		8	9		7	7.1	25
SEPT.30	S	0.337	0.248													8	9				
TOTAL		16.64	10.74	6"	374	64	360	6				0.024		0.86	10.92	7.03	240	270	66		
AVERAGE		0.618	0.368		93.5	14	88	1.5				0.006		0.21	2.73	1.76	43		16.5		
MAXIMUM		1.076	0.769		108	19	120	4	6.6	6.5	8.4	0.73	0.01	0.62	3.16	2.31	79		21.2	7.4	7.4
MINIMUM		0.337	0.248		69	10	49	0	4.4	4.4	7	0.26	0.001	0	2.07	1.12	27		10.8	6.9	7

OPERATOR-----

OPERATOR CERTIFACTIO #16382

DATE	DAY	FLOW	RAINFALL	TSS	BOD	DISSOLVED OXYGEN	SSV 30/60	MLSS	MLVSS	SVI	TCR	AMMONIA N.	PHOSPHORUS	E - Coll	SLUDGE WASTED	CHEMICAL'S USED		Total N.	PH	TEMP.			
Month/Year	WK	MGD	INCHES	MG/L	MG/L	MGL	ML/L	MG/L	MG/L	%	MG/L	MG/L	MG/L	EFF	GALLONS X 1000	CL	PPD	SO2	MG/L	S.U.	C.		
AUG.2017		INF	EFF	INF	EFF	A.T.#1	A.T.#2	EFF	A.T.	A.T.	CCT	EFF	INF	EFF					INF	EFF	INF	EFF	
AUG.01	T	0.39	0.267			4.6	4	7.8			0.48					8	9		8.1	8.1	25	25	
AUG.02	W	0.398	0.258			4.6	4.7	7.8	22	20	0.34	0.08				8	9		7	7.2	24	25	
AUG.03	T	0.395	0.265	97	8	307	0	4.4	3.9	7.6	0.41		0	2.42	1.99	8	9	9	19.3	7	7.2	24	24
AUG.04	F	0.493	0.331			3.2	6.4	7.7	21	19	0.21					8	9	9	8	8.1	24	25	
AUG.05	S	0.493	0.331													8	9						
AUG.06	●	0.493	0.331	1"												8	9						
AUG.07	M	0.489	0.342			6.1	5.4	7.7	20	19	0.31				5	8	9		7.7	7.7	23	24	
AUG.08	T	0.4	0.278			5.4	6.1	7.6			0.43					8	9		8	7.8	25	24	
AUG.26	W	0.412	0.284			4.9	5.5	7.8	20	18	0.45	0.08				8	9		7.6	7.6	25	25	
AUG.15	T	0.431	0.284	114	6.8	95	0	4.8	6.4	7.4	0.53		0.5	2.34	1.63	8	9	9	15.9	7.7	7.6	25	25
AUG.14	F	0.447	0.249			4.3	6.3	7.7	20	18	0.46					8	9		7.6	7.6	25	25	
AUG.12	●	0.447	0.293	.4"												8	9						
AUG.13	S	0.447	0.293													8	9		7.7	7.8	23	24	
AUG.14	M	0.489	0.754			4.6	5.9	7.6	20	18	0.31				5	8	9		7.7	7.6	25	25	
AUG.15	T	0.409	0.268			3.5	5.6	7.6			0.87					8	9		7.7	7.6	25	25	
AUG.16	W	0.418	0.249			4	4.7	7.6	21	19	0.31	0.01				8	9		14.6	7.7	7.5	25	26
AUG.14	T	0.395	0.271	142	4.8	125	0	4.7	4.7	7.4	0.41		0.26	3.34	1.75	8	9	9	7.4	7.5	25	27	
AUG.19	F	0.361	0.249			4.8	6.4	7.6	22	20	0.7					8	9						
AUG.19	●	0.361	0.253													8	9		7.6	7.6	25	25	
AUG.25	●	0.361	0.253													8	9		7.7	7.6	24	25	
AUG.21	M	0.389	0.263			5.5	6.4	7.6	22	20	0.88					8	9		7.7	7.6	24	25	
AUG.25	T	0.51	0.343	.5"		5.5	5.3	7.6			0.3					8	9		7.1	7.4	24	25	
AUG.26	W	0.394	0.287			4.9	4.7	7.5	22	20	0.56	0.08				8	9		18.4	7.7	7.6	24	25
AUG.21	T	0.355	0.249	100	4.3	88	0	5.5	6.4	7.6	0.45		0.32	0.27	2.14	8	9	9	7.4	7.6	25	24	
AUG.25	F	0.357	0.249			5	5.9	8	24	20	0.37					8	9						
AUG.26	●	0.357	0.249													8	9						
AUG.21	●	0.357	0.249													8	9		7.6	7.6	24	23	
AUG.28	M	0.406	0.28	.5"		5.7	5.9	7.6	24	22	0.35				5	8	9		7.5	7.6	24	25	
AUG.29	T	0.373	0.258			5	5.2	7.6			0.6					8	9		19.1	7	7.3	25	25
AUG.30	W	0.479	0.249	161	4.3	110	0	5.7	5.6	7.6	0.55	0.12	0.26	2.72	2.09	8	9	9	7.6	7.6	24	23	
AUG.31	T	0.931	0.754	.5"		4.9	6.1	7.8			0.39					8	9		73				
TOTAL		13.43	9.141	2.9	614	28	725	0			102	0.04	1.36	13.09	9.6	248	279		14.5				
AVERAGE		0.43	0.284		123	5.6	145	0			51	0.07	0.27	2.62	1.92				19.3	8.1	8.1	25	27
MAXIMUM		0.931	0.754		161	8	307	0	6.1	6.4	0.88	0.12	0.32	3.34	2.14				14.6	7.1	7.2	23	23
MINIMUM		0.357	0.249		97	4.2	88	0	3.2	3.9	0.21	0.01	0	2.27	1.63								

OPERATOR *Robert Spencer*

OPERATOR CERTIFICATION # 16382

DATE	DAY	FLOW		RAINFALL	TSS	BOD	DISSOLVED OXYGEN		SSV 30/60	MLSS	MLVSS	SVI	TCR	AMMONIA N.	PHOSPHORUS	E - Coil	SLUDGE WASTED	CHEMICAL'S USED		Total N.	PH	TEMP.	
Month/Year	WK	MGD	EFF	INCHES	MG/L	MG/L	A.T. # 1	A.T. # 2	ML/L	MG/L	MG/L	%	MG/L	MG/L	MG/L	COL/100ML	GALLONS X 1000	CL	PPD	SO2	MG/L	S.U.	C.
July .2017		INF	EFF		INF	EFF	INF	EFF	A.T.	A.T.	A.T.	A.T.	CCT	INF	EFF	EFF	DIGESTER				EFF	INF	EFF
July .01	S	0.636	0.574	1.4"														8	9				
July .02	S	0.636	0.574															8	9			7.4	7.5
July .03	M	0.682	0.432				5.9	6.1	8.1	26	23		0.49					8	9				22
July .04	T	0.682	0.432	1"														8	9			7.2	7.5
July .05	W	1.278	0.973	1"			5.2	6.4	7.1	20	17		0.22	0.002				8	9		9.75	7.2	22
July .06	T	1.381	1.131	1"	73	37	2.9	5.7	8				0.37		0.34	1.93	1.42	8	9			7.6	23
July .07	F	0.899	0.561				6.6	7.5	7.7	22	20		0.36					8	9			7.7	7.3
July .08	S	0.899	0.561															8	9				
July .09	S	0.388	0.561															8	9			7.1	7.5
July .10	M	0.653	0.413				5.7	6.9	7.9	24	21		0.64					8	9			7.3	7.6
July .11	T	0.603	0.378				5.9	6.2	7.9				0.6					8	9			7.4	7.5
July .12	W	0.528	0.331				6.1	6.4	8	25	22		0.53	0.002				8	9		15	7.3	7.5
July .13	T	0.503	0.32		83	13	5.4	6.1	7.5				0.65		0.27	1.93	1.17	8	9			7.3	7.5
July .14	F	0.445	0.284				5.9	5.9	7.8	24	21	391	0.5					8	9			7.3	7.5
July .15	S	0.445	0.284															8	9				
July .16	S	0.445	0.284															8	9			7.1	7.4
July .17	M	0.413	0.272				5.9	5.6	7.4	24	21		0.74				5	8	9			7.4	7.5
July .18	T	0.401	0.257				6.3	6.4	7.9				0.5					8	9			7.2	7.5
July .19	W	0.413	0.284				5.5	5.7	7.6	24	21		0.62	0.01				8	9		18	7.2	7.5
July .20	T	0.401	0.25		126	9.2	5.9	5.6	7.6				0.8		0	2.72	1.9	8	9			7.2	7.4
July .21	F	0.4	0.253				5.9	5.6	7.9	22	20		0.35				5	8	9			7.2	7.4
July .22	S	0.4	0.253															8	9				
July .23	S	0.4	0.253															8	9			7.1	7.5
July .24	M	0.388	0.262				5.5	6	7.9	22	20		0.44					8	9			7.4	7.9
July .25	T	0.38	0.26				5.4	5.2	7.5				0.43					8	9			7.3	7.5
July .26	W	0.408	0.25				5	4.4	7.4	24	21	422	0.57	0.51	0.006			8	9		22.7	7.3	7.5
July .27	T	0.4	0.262	.5"	177	6.3	4.8	4.6	7.4				0.4		0	3.91	2.26	8	9			7.3	7.5
July .28	F	0.372	0.27				5	4.2	7.4	22	20		0.36					8	9			7.4	7.6
July .29	S	0.372	0.27															8	9				
July .30	S	0.372	0.27															8	9				
July .31	M	0.368	0.265				5	5.6	7.9	21	19		0.3					8	9			8.1	8.2
TOTAL		17.512	12.004	4.9	459	66						813	118	0.02	0.61	9.65	6.75	248	279		65.5		
AVERAGE		0.565	0.387		115	16	92	0				406	59	0.005	0.15	2.41	1.68				16.4	8.1	8.2
MAXIMUM		1.381	1.131		177	37	141	0	6.3	7.5	8.1	26	23	422	0.34	3.91	2.26	162			22.7	8.1	8.2
MINIMUM		0.368	0.253		73	6.3	68	0	4.8	4.4	7.4	20	17	391	0	1.09	1.17	16			9.75	7.1	7.3

OPERATOR 

OPERATOR CERTIFACATION # 16382

DATE	DAY	FLOW	RAINFALL	TSS	BOD	DISSOLVED OXYGEN			SSV 30/60	MLSS	MLVSS	SVI	TCR	AMMONIA N.			PHOSPHORUS			E - Coil	SLUDGE WASTED	CHEMICAL'S USED		Total N.	PH	TEMP.
Month/year	WK	MGD	INCHES	MG/L	MG/L	MG/L	A.T. #1	A.T. #2	ML	MG/L	MG/L	%	MG/L	MG/L	MG/L	MG/L	EFF	EFF	COL/100ML	GALLONS X 1000	CL	SO2	MG/L	S.U.	C.	
JUNE.2017		INF	EFF																							
JUNE .01	T	0.407	0.274																	16						
JUNE .01	T	0.407	0.274	72	4.5	87	0	4.4	6.7	8.7											8	9		14.2	7.5	
JUNE .02	F	0.559	0.413					4.2	6.7	8.7	25 23										8	9		7.5	7.6	
JUNE .03	S	0.559	0.413																		8	9				
JUNE .06	S	0.559	0.413																		8	9		7.1	7.2	
JUNE .25	M	1.487	1.373					6.7	4.6	7.2	20 18										8	9		7.2	7.5	
JUNE .25	T	1.143	0.779					6.7	4.6	8											8	9		7.2	7.5	
JUNE .07	W	0.816	0.533					6.7	6.3	8.9	22 20										8	9		7.3	7.2	
JUNE .07	T	0.668	0.436					6.7	6.3	8.9										37	8	9		7.38	7.3	
JUNE .09	F	0.546	0.34					6.6	6	8.7	25 22										8	9		7.2	7.6	
JUNE .10	S	0.546	0.34																		8	9				
JUNE .11	S	0.546	0.34																		8	9		7.5	7.2	
JUNE .16	M	0.457	0.304					4.3	4	8.4	26 23										8	9		7.4	7.5	
JUNE .13	T	0.466	0.308					6.3	5.7	8.1											8	9		7.4	7.5	
JUNE .16	W	0.486	0.313					4.3	6.7	8.7	25 23	372									8	9		7.5	7.2	
JUNE .25	T	0.704	0.479	1"	104	4.4	68	5	6.3	6.3	8									24	8	9		17.2	7.2	
JUNE .16	F	0.535	0.345					6.7	7.2	8.7	26 23										8	9		7.3	7.5	
JUNE .16	S	0.535	0.345																		8	9				
JUNE .18	S	0.535	0.345	.5"																	8	9		7.3	7.5	
JUNE .19	M	0.44	0.371					5.6	7.3	8.1	24 21										8	9				
JUNE .20	T	0.452	0.287																		8	9		7.4	7.5	
JUNE .25	W	0.458	0.29					6.7	6.5	8.7	26 23										8	9		15.9	7.2	
JUNE .26	T	0.893	0.626	1"	94.3	5.4	68	0	5.8	4.7	7.5									8	9		7.2	7.5		
JUNE .23	F	0.921	0.621	7.4				6.5	5.8	7.9	27 24										8	9		7.5	7.5	
JUNE .25	S	0.921	0.621																		8	9				
JUNE .25	S	0.921	0.621																		8	9				
JUNE .26	M	0.597	0.371					5.6	7.6	8.4	22 19										8	9		7.4	7.5	
JUNE .27	T	0.452	0.325					6.3	6.2	8.5	25 22	425									8	9		7.5	7.5	
JUNE .25	W	0.489	0.306					5.6	6.5	8.4											8	9		7.5	7.9	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	
JUNE .27	T	0.48	0.308					6.7	6.2	8.9											8	9		7.5	7.5	

OPERATOR *Rebecca Blumner*

OPERATOR CERTIFICATION # 16382

DATE	DAY	FLOW		RAINFALL	TSS		BOD		DISSOLVED OXYGEN		SSV 30/60		MLSS		MLVSS		SVI	TCR		AMMONIA N.		PHOSPHORUS		E - Coil	SLUDGE WASTED	CHEMICAL'S USED		Total N.	PH	TEMP.							
Month/Year	WK	MGD	EFF	INCHES	MG/L	EFF	MG/L	EFF	A.T.#1	A.T.#2	EFF	ML/L	MG/L	A.T.	MG/L	A.T.	MG/L	0%	MG/L	EFF	INF	EFF	MG/L	EFF	COL/100ML	GALLONS X 1000	CL	PPD	SO2	MG/L	EFF	S.U.	INF	EFF	INF	EFF	C.
MAY.2017		INF			INF	EFF		EFF	A.T.#1	A.T.#2	EFF	A.T.		A.T.					CCT	MG/L	EFF	INF	EFF	MG/L	EFF			CL	PPD	SO2		EFF	INF	EFF	INF	EFF	
MAY.01	M	0.507	0.346						8.6	6.2	8.9	17 15						0.37								5	8	9					7.3	7.5	20	21	
MAY.08	T	0.437	0.392						7.3	5.3	8.9							0.41	0.009								8	9				7.3	7.2	22	21		
MAY.03	W	0.443	0.305									20 18						0.4									8	9				7.5	7.2	21	21		
MAY.09	T	0.724	0.496	.7"	85	6.7	70	5	8.6	3	11.4							0.4			0	2.03	1.68	20		8	9				16.1	7	7.5	19	20		
MAY.26	F	0.545	0.392						4	6.9	10	21 19						0.53									8	9				7.5	7.4	18	18		
MAY.08	S	0.545	0.392	1"																							8	9									
MAY.27	S	0.545	0.392																								8	9									
MAY.08	M	0.468	0.325						5.2	6.9	9.8	21 19						0.29									8	9				7.3	7.4	19	19		
MAY.09	T	0.468	0.316						3.4	3.9	9.5							0.45	0.009								8	9				7.5	7.2	20	21		
MAY.10	W	0.434	0.287						8.6	3.2	9.3	22 20	412					53	0.64								8	9				7.2	7.2	21	21		
MAY.16	T	0.657	0.411	1"	125	6.3	92	5	8.6	2.5	8.9							0.44			0.43	2.45	1.68	8		8	9				7.3	7.1	20	22			
MAY.12	F	0.499	0.345						8.6	3	9.1	21 19						0.44									8	9				18	7.3	7.2	20	21	
MAY.13	S	0.499	0.345																								8	9									
MAY.14	S	0.468	0.345																								8	9									
MAY.18	M	0.434	0.467						8.6	3	9	21 19						0.78									8	9				7.3	7.4	21	22		
MAY.16	T	0.433	0.325						4	2.5	8.9							0.4									8	9				7.6	7.5	21	22		
MAY.16	W	0.413	0.259						8.6	2.5	8.2	19 17						0.68	0.003								8	9				7.5	7.1	21	22		
MAY.18	T	0.388	0.259		78	5.5	80	0	4	2.7	8.9							0.78			0.41	2.03	2.34	30		8	9				19.3	7.3	7.5	23	23		
MAY.19	F	0.447	0.259						4	3	8.9	20 19						0.4								5	8	9				7.5	7.4	21	22		
MAY.21	S	0.447	0.298	8"																							8	9									
MAY.21	S	0.447	0.298																								8	9									
MAY.22	M	0.362	0.259						8.6	4.3	8.9	21 19	409					51	0.4								8	9				7.5	7.6	22	22		
MAY.23	T	0.43	0.301						5.2	4.3	8.9							0.68								5	8	9				7.5	7.4	22	22		
MAY.24	W	0.867	0.627	1"					5.1	3.4	9	20 18						0.15	0.009								8	9				7.5	7.4	22	22		
MAY.08	T	0.566	0.39		102	11	43	5	6.7	7.6	8.9							0.45			0	1.9	2.31	27		8	9				17.5	7.1	7.3	21	21		
MAY.26	F	0.601	0.39						4	6.1	9	20 18						0.68									8	9				7.3	7.6	20	20		
MAY.27	S	0.601	0.39	.7"																							8	9				7.5	7.6	22	21		
MAY.27	S	0.601	0.39																								8	9									
MAY.27	S	0.601	0.39																								8	9									
MAY.08	M	0.601	0.39						8.6	4.9	8.9							0.68									8	9				7.5	7.2	22	21		
MAY.30	T	0.501	0.341						8.6			24 22						0.68									8	9				7.4	7.1	21	22		
MAY.31	W	0.431	0.29						8.6	2.4	8.7							0.68	0.006								8	9									
Total		15.86	10.97	5.3	390	25	285	5					821	104					0.003		0.84	8.41	8.26			248		279		71							
average		0.512	0.363		98	7.4	71	5					411	92					6.2		0.41	2.1	2.07	20						17.7							
maximum		0.867	0.496		125	11	92	0	8.6	2.5	11.4	24 22	412					53	0.15	0.009	0.43	2.45	2.34							19.3	7.8	7.7	23	22			
minimum		0.388	0.259		78	5.5	43	0	3.4	2.4	8.2	17 15	411					51	0.78	0.003	0	1.9	1.68							16	7.1	7.1	18	18			

OPERATOR *Rube Hammer*

OPERATOR CERTIFACATION # 16382

DATE	DAY	FLOW		RAINFALL	TSS		BOD		DISSOLVED OXYGEN		SSV 30/60		MLSS		MLVSS		SVI	TCR		AMMONIA N.		PHOSPHORUS		E - Coil		SLUDGE WASTED		CHEMICAL'S USED		Total N.	PH		TEMP.						
Month/year	WK	MGD	EFF	INCHES	MG/L	EFF	MG/L	EFF	A.T. #1	A.T. #2	MG/L	EFF	M/L	MG/L	MG/L	A.T.	0%	MG/L	CCT	EFF	MG/L	EFF	MG/L	EFF	COL/100ML	EFF	GALLONS X 1000	DIGESTER	CL	PPD	SO2	MG/L	S.U.	INF	EFF	INF	EFF		
APRIL 2017		INF			INF																INF		INF																
April .20	S	0.457	0.34																											8		9							
April .02	S	0.487	0.34																											8		9							
April .03	M	0.551	0.393	.5"									20 18	453			44													8		9							
April .04	T	0.491	0.342																											8		9							
April .05	W	0.487	0.34																											8		9							
April .06	T	0.511	0.379	.3"	75	4.3	58	0			7.8								0.61		0	2.16	1.78		6		5		8		9			14.6		7.6		15	
April .07	F	0.401	0.298						7.2	6.4	10	20 18							0.36											8		9				7.4	7.4	19	19
April .28	S	0.401	0.298																											8		9							
April .09	S	0.401	0.298																											8		9							
April .10	M	0.395	0.287						5.4	3.8	9.5	21 20							0.49											8		9			7.4	7.3	21	20	
April .10	M	0.395	0.287						5.4	3.8	9.5	21 20							0.49											8		9			7.4	7.3	21	20	
April .10	T	0.842	0.622	1"					5.6	6	9.7								0.53											8		9			7.6	7.5	19	20	
April .13	W	0.597	0.433						5.6	6.5	9.5	19 17							0.21											8		9			7.3	7.3	20	20	
April .13	T	0.485	0.323		55	7.6	58	\$	5.4	6.5	9.3								0.27	0.012		0	1.39	1.75		13			8		9			14.9	7.3	7.5	21	22	
April .13	F	0.485	0.323																											8		9							
April .15	S	0.485	0.323																											8		9							
April .16	S	0.485	0.323	0.5																										8		9			7.6	7.4	19	21	
April .17	M	0.509	0.341						4.7	6.5	9.4	19 17							0.46											8		9			7.6	7.6	20	21	
April .13	T	0.445	0.312						4.7	6.2	9.3								0.31	0.61										8		9			7.6	7.6	20	21	
April .19	W	0.426	0.298						4.7	6.5	9.3	20 19	417						0.32		0	3.24	2.16		34				8		9			7.4	7.3	21	22		
April .20	T	0.41	0.273		132	6.2	118	\$	4	6.5	9.3								0.4											8		9			7.4	7.4	22	22	
April .21	F	1.058	0.768						3.7	6.4	9.7	20 19							0.43											8		9			7.1	7.2	19	22	
April .22	S	1.058	0.768																											8		9							
April .20	S	1.058	0.768	2.4																										8		9							
April .24	M	0.912	0.61						5.2	6.5	9.3	22 20							0.49											8		9			7.2	7.4	19	18	
April .25	T	0.723	0.473						6	6	9.7								0.35											8		9			7.2	7.4	20	20	
April .26	W	0.704	0.444						5.6	6.4	9.3	19 17							0.31	0.001										8		9			7.3	7.4	20	22	
April .27	T	0.609	0.405		82	8.2	53	\$	5.6	6.5	9.3								0.46											8		9			7.5	7.6	24	25	
April .28	F	0.563	0.354						5.2	6.4	9.4	20 19							0.41		0	1.43	1.16		16				8		9			9	7.3	7.4	20	20	
April .29	S	0.563	0.354																											8		9							
April .20	S	0.563	0.354	.5"																										8		9							
total		17.53	12.16	5.2	344	26	287	\$						870			92	33		0	9.7	6.9				20		240	270		54.5								
average		0.584	0.405		86	6.6	72	\$						435			46	8.3		0	2.1	1.7		14.4							13.6								
maximum		1.058	0.768		132	8.2	118	\$	7.2	6.5	10	22 20					0.43	0.012		0	3.24	2.16		34								15.8		7.6	7.6	24	25		
minimum		0.395	0.298		55	4.3	53	0	3.7	3.8	7.8	19 17					0.21	0.001		0	1.39	1.16		6								9	7.6	7.6	24	25			

phone

OPERATOR *Richard Thomas*

OPERATOR CERTIFICATION # 16382

p

Phone = 270-487-8410

DATE	DAY	FLOW	RAINFALL	TSS	BOD	DISSOLVED OXYGEN	SSV 30/60	MLSS	MLVSS	SVI	TCR	AMMONIA N.	PHOSPHORUS	E - Coil	SLUDGE WASTED	CHEMICAL'S USED	Total N.	PH	TEMP.		
Month/Year	WK	MGD	INCHES	MG/L	MG/L	A.T. # 1	A.T. # 2	MG/L	MG/L	0%	MG/L	MG/L	MG/L	COL/100ML	GALLONS X 1000	CL	PPD	SO2	MG/L	S.U.	C.
March 2017		INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	CL	PPD	SO2	MG/L	INF	EFF
March 01	W	0.58	0.424												5	8	9				
March 02	T	0.428	0.325	119	11	85	\$				0.01			18		8	9	9	19.1		13
March 03	F	0.366	0.283													8	9				
March 04	S	0.366	0.283													8	9				
March 03	S	0.366	0.283													8	9	9			
March 03	M	0.408	0.319													8	9	9			
March 01	T	1.011	0.75									1				8	9	9			
March 03	W	0.632	0.283													8	9	9	11.9		14
March 03	T	0.595	0.762								0.01			25		8	9	9			
March 03	F	0.781	0.589													8	9				
March 11	S	0.781	0.589													8	9				
March 12	S	0.781	0.586													8	9				
March 03	M	0.595	0.439												5	8	9				
March 11	T	0.519	0.401													8	9				
March 18	W	0.447	0.386													8	9				
March 18	T	0.423	0.358	64	0	81	0				0.01	1	2.05	1.19	18	8	9	9	10.5		11
March 17	F	0.718	0.509												5	8	9				
March 18	S	0.718	0.509													8	9				
March 03	S	0.718	0.509													8	9				
March 20	M	0.578	0.386													8	9				
March 24	T	0.527	0.374													8	9				
March 02	W	0.457	0.342													8	9				
March 26	T	0.453	0.36													8	9				
March 24	F	0.632	0.386	107	10	62	0				0.01	1	1.7	1.41	25	8	9	9	14.7		17
March 24	F	0.632	0.386													8	9				
March 03	S	0.632	0.386													8	9				
March 26	S	0.632	0.386													8	9				
March 24	M	0.799	0.557													8	9				
March 26	T	0.632	0.445													8	9				
March 26	W	0.632	0.445													8	9				
March 03	T	0.632	0.386													8	9	9	11.6		18
March 01	F	0.457	0.34	68	5.9	50	0				0.01	0	1.51	1	15	8	9				
Total		18.43	13.32	5"	428	39	348	0			41.6	20 18	377		45	248	279		67.8		
Average		0.595	0.429		85.6	7.8	70	\$			8.32								13.6		
Maximum		1.011	0.762		119	11	81	0			8.8	20 18							19.1		18
Minimum		0.366	0.283		64	0	50	0			7.4	14 12							10.5		13

OPERATOR *Robert Hester*

OPERATOR CERTIFICATION # 16382

PHONE -270-487-8410

DATE	DAY	FLOW	RAINFALL	TSS	BOD	DISSOLVED OXYGEN	SSV 30/60	MLSS	MLVSS	SVI	TCR	AMMONIA N.	PHOSPHORUS	E - Coil	SLUDGE WASTED	CHEMICAL'S USED			Total N.	PH	TEMP.	
Month/Year	WK	MGD	INCHES	MG/L	MG/L	MGL	MGL	MGL	MGL	%	MG/L	MG/L	MG/L	COL/100ML	GALLONS X 1000	CL	PPD	SO2	EFF	S.U.	C.	
FEB.2017	INF	EFF		INF	EFF	INF	EFF	A.T. # 1	A.T. # 2	EFF	A.T.	A.T.	A.T.	CCT	MG/L <td>INF</td> <td>MG/L<td>INF</td><td>EFF</td><td>1.74</td><td></td><td></td></td>	INF	MG/L <td>INF</td> <td>EFF</td> <td>1.74</td> <td></td> <td></td>	INF	EFF	1.74		
FEB.01	W	0.381	0.299													8		9				
FEB.02	T	0.381	0.298	89	23	88	0				0.05		1.4	2.59	1.74	12		8	9	18.2	7.31	12
FEB.03	F	0.333	0.283												6	8		9				
FEB.04	S	0.333	0.283													8		9				
FEB.05	S	0.333	0.283													8		9				
FEB.06	M	0.176	0.272	power was off			14	12								8		9				
FEB.07	T	0.525	0.401	.8"												8		9				
FEB.08	W	0.418	0.316				15	14								8		9				
FEB.09	T	0.335	0.285	87.5	16	108	0		8.41		0.03	18	2.63	2.66	8	8		9	20.3	7.9	11	
FEB.10	F	0.355	0.272				14	12	389	36						8		9				
FEB.11	S	0.356	0.272													8		9				
FEB.12	S	0.355	0.272													8		9				
FEB.13	M	0.369	0.242													8		9				
FEB.14	T	0.487	0.358	.5"												8		9				
FEB.15	W	0.379	0.302				14	12				0	2.36	2.38	8	8		9	26.2	7.5	11	
FEB.16	T	0.357	0.272	89	14	125	0		9.85		0.02				5	8		9				
FEB.17	F	0.353	0.283				14	12								8		9				
FEB.18	S	0.363	0.263													8		9				
FEB.19	S	0.353	0.283													8		9				
FEB.20	M	0.363	0.388				cleaned chlorine tank today								5	8		9				
FEB.21	T	0.374	0.44				15	13	373	40						8		9				
FEB.22	W	0.373	0.277													8		9				
FEB.23	T	0.378	0.281	108	12	121	2		8.1		0.01	0	2.5	2.26	12	8		9	21.3			
FEB.24	F	0.37	0.27				15	13								8		9		7.8	15	
FEB.25	S	0.37	0.276																			
FEB.26	S	0.37	0.276																			
FEB.27	M	0.39	0.276																			
FEB.28	T	0.451	0.332																			
TOTAL		10.34	8.265	1.1	373	64	442	2	36.46		76	19.4	10.8	9.02					86	30.5		
AVERAGE		0.369	0.294		93	16	110	0	9.1		38	4.9	2.7	2.26	9.2				21.5	7.6		
maximum		0.525	0.401		108	23	125	2	10.3			18	2.63	2.66					26.2	7.9	15	
minimum		0.176	0.242		87	12	88	0	8.1			0	2.36	1.74					18.2	7.3	11	

OPERATOR 

OPERATOR CERTIFICATION # 16362

PHONE -270-487-8410

City of Tompkinsville

City Clerk

Lesley Page

o

Attorney

Richard D. Jackson

Scotty D. Turner, Mayor

206 N Magnolia Street

Tompkinsville, KY 42167

Phone (270-487-6776)

TTY (Hearing or Speech Disabled) 800-648-6056

August 17, 2016

Commissioners

Sherry Crawford

Ricky Richardson

Anita Bartlett

Bobby Adams

Certified No. 7007 2680 0002 6588 6193

Return Receipt Requested

Department for Environmental Protection

Division of Enforcement

300 Sower Blvd. 3rd Floor

Frankfort, KY 40601

Attn: Michelle Rice

Environmental Scientist IV

Re: Notice of Violation Response
City of Tompkinsville WWTP
KPDES Permit No. KY0020702
Monroe County, Ky

Dear Michelle Rice:

Please consider this letter as a response to the Notice of Violation letter we received from your office dated July 28, 2016. The cited KPDES permit violations occurred at our Wastewater Treatment Plant and was reported in the required monthly Discharge Monitoring Reports.

For your consideration, we would like to propose the following explanation as to why these violations occurred at our facility and the corrective action plan we will implement to hopefully insure compliance with our KPDES permit requirements in the future.

Should you require additional information, please contact me at Tompkinsville City Hall (270-487-6776)

Sincerely,



Scotty Turner, Mayor
City of Tompkinsville

Notice of Violation
Response Letter

1. Description of Non Compliance:

Failing to comply with the KPDES permit limits for Total Suspended Solids (TSS) during the months of April 2015 and February 2016.

Corrective Action Plan:

The reason(s) for the Total Suspended Solids violation was due to large amount of water passing through the plant after a total of 8.5 inches of rain was received in the month of April 2015.

The Total Suspended Solids violation in the month of February 2016 was also caused by large amount of rainfall (5.5 inches) during the month.

2. Description of Non Compliance:

Failing to comply with KPDES permit limits for Total Residual Chlorine (TRC) during the months of April, May, June, and September 2015; and January 2016.

Corrective Action Plan:

The only reasonable explanation for this violation is that sufficient Sulfur Dioxide (SO₂) was not added to effluent to get desired results.

In the future, plant operators are instructed to insure enough dechlorinating agent is added to effluent that will achieve desired results.

3. Description of Non Compliance:

Failing to comply with permit limits for Biochemical Oxygen Demand(BOD) during the month of April 2015.

Corrective Action Plan:

City of Tompkinsville

City Clerk

Lesley Page

•

Attorney

Richard D. Jackson

Scotty D. Turner, Mayor

206 N Magnolia Street

Tompkinsville, KY 42167

Phone (270-487-6776)

TTY (Hearing or Speech Disabled) 800-648-6056

Commissioners

Sherry Crawford

Ricky Richardson

Anita Bartlett

Bobby Adams

NOTICE OF VIOLATION RESPONSE LETTER

- 1) **CAUSE:** The reason(s) for the Total Suspended Solids violation was due to large amount of water passing through the plant after a total of 8.5 inches of rain was received in the month of April 2015. The Total Suspended Solids violation in the month of February 2016 was also caused by large amount of rainfall (5.5 inches) during the month.
 - a. **REMEDIATION:** The City of Tompkinsville has been working diligently throughout the city to identify problematic locations within the sanitary sewer collection system which allow for I/I. The City just recently completed a project which replaced approximately 2 miles of failing sanitary sewer mains to assist in eliminating the I/I problem. Once these locations are identified and located, point repairs are being made or proposed to be repaired pending sufficient funds. We feel that reducing the amount of I/I within the sanitary sewer collection system will greatly reduce these subpar occurrences.
- 2) **CAUSE:** The only reasonable explanation for this violation is that sufficient Sulfur Dioxide (SO₂) was not properly added to the effluent to get the desired results.
 - a. **REMEDIATION:** In sequence with identifying and fixing problematic locations where I/I are introduced into the collection system, we will also ensure that our monitoring efforts at the WWTP are heightened to an acceptable manner by implementing more stringent monitoring protocols and procedures. These new procedures will take effect immediately.
- 3) **CAUSE:** The treatment facility experiences a large increase of influent wastewater flow during heavy rain events. This is largely to do the amount of infiltration/inflow (I/I) that makes its way into our sanitary sewer collection system. The month of April in 2015 was particularly wet and we suspect this is the reason for the subpar performance.
 - a. **REMEDIATION:** The City of Tompkinsville has been working diligently throughout the city to identify problematic locations within the sanitary sewer collection system which allow for I/I. The City just recently completed a project which replaced approximately 2 miles of failing sanitary sewer mains to assist in eliminating the I/I problem. Once these locations are identified and located, point repairs are being made or proposed to be repaired pending

City of Tompkinsville

sufficient funds. We feel that reducing the amount of I/I within the sanitary sewer collection system will greatly reduce these subpar occurrences.

4) **CAUSE:** These occurrences are likely caused by high flow level due to I/I and/or a combination of I/I coupled with improper disinfection techniques.

a. **REMEDIATION:** In sequence with identifying and fixing problematic locations where I/I are introduced into the collection system, we will also ensure that our monitoring efforts at the WWTP are heightened to an acceptable manner by implementing more stringent monitoring protocols and procedures. These new procedures will take effect immediately.

5) **CAUSE:** These occurrences are likely caused by high flow levels due to I/I. When these events occur it is difficult to apply the proper aeration.

a. **REMEDIATION:** In sequence with identifying and correcting problematic locations where I/I are introduced into the collection system, we will also examine our current aeration equipment and facilities, as well as, review our procedures to ensure proper aeration. This review of our equipment and procedures will begin immediately.

6) **CAUSE:** These occurrences are likely caused by high flow levels due to I/I. When these events occur it reduces the volumetric settling time allowed at the WWTP.

a. **REMEDIATION:** In sequence with identifying and correcting problematic locations where I/I are introduced into the collection system, we will also examine our current equipment such as screens, basins, etc., as well as, review our procedures to ensure proper treatment processes are being maintained throughout the operation of the plant.

Sincerely,



Scotty D. Turner

Mayor

City of Tompkinsville



MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

Division of Water
2751 Campbellsville Rd
Columbia, KY 42728
www.kentucky.gov

January 13, 2016

City of Tompkinsville
Attn: Mayor Scotty Turner
206 N Magnolia St.
Tompkinsville, KY 42167

RE: Tompkinsville WWTP -- 3174
Permit No.: KY0020702
Monroe County, Kentucky
Activity ID: CIN20160001

Dear Mayor Turner:

Attached for your information and records is a copy of the WW CEI-Minor Mun I performed at Tompkinsville WWTP on January 8, 2016. At the time of inspection your facility received a rating of **Out of Compliance – Violations Documented.**

- A DMR review indicated the following excursions:
June 2015- Total Cl2
July 2015 – E.coli
August 2015- DO %, E.coli
September 2015- Do%, Total Cl2
November 2015- Solids Suspended % removal.

If you have any questions or comments concerning this inspection, please contact the Columbia Regional Office at: (270) 384-4734.

Sincerely,

Josh Pedigo
Environmental Inspector
Columbia Regional Office
Division of Water



Energy and Environment Cabinet
Department for Environmental Protection
Division of Water
Wastewater Inspection Report

AI ID: 3174 **AI Type:** SANI-Wastewater Treatment & Collection (2213)
AI Name: Tompkinsville WWTP
AI Address: Poplar Log Rd
City: Tompkinsville, **State:** Kentucky **Zip:** 42167
County: Monroe **Regional Office:** Columbia Regional Office
Latitude: 36.7 **Longitudes:** -85.706389
Inspection Type: WW CEI-Minor Mun Activity #: CIN20160001
Inspection Start Date: January 8, 2016 **End Date:** January 8, 2016
Site/Permit ID: KY0020702

Lead DEP Investigator: Josh Pedigo
Persons Interviewed: Ricky Hammer

General Comments: On January 8, 2016 Josh Pedigo did an unannounced inspection on the Tompkinsville WWTP. At the time of the inspection the plant was running well and Mr. Hammer indicated that there were no problems with the treatment processes. The plant was clean and the only issues were the DMR excursions from the prior months.

Overall Compliance Status: Out of Comp- Violations documented

Investigation Results

SI: AIOO3174

SI Description:

Inspector Comment:

Requirement: Does the facility hold the proper KPDES permit?. [401 KAR 5:055 Section 2]

Compliance Status: C-No Violations observed

Comment: KPDES permit # KY0020702

Requirement: Have all required permits been obtained from the Division of Water prior to the construction or modification of the facility? [401 KAR 5:005 Section 1]

Compliance Status: C-No Violations observed

Comment: KPDES permit # KY0020702

Requirement: Is the facility being operated under the supervision of a properly certified operator? [401 KAR 5:010 Section 1]

Compliance Status: C-No Violations observed

Comment: Ricky Hammer WW class II #16382
Randall Hagan

Requirement: Is the collection system under the primary responsibility of an individual who holds an active collection system certification at the level appropriate for the size of the treatment facility receiving the waste? [401 KAR 5:010 Section 2]

Compliance Status: C-No Violations observed

Comment: Danny Stinson

Requirement: Does the permittee retain records of all monitoring information including: the date, exact place, and time of sampling or measurements; the name of the individual who performed the sampling or measurements; the dates and times analyses were performed; the name of the individual who performed the analyses; the analytical techniques or methods used; the results of the analyses; all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation; copies of all reports required by this permit; and records of all data used to complete the application for this permit, for the period required by the cabinet and at a minimum of at least

three (3) years from the date of the sample, measurement, report, or application? [401 KAR 5:065 Section 2(1)]
Compliance Status: C-No Violations observed
Comment: At the time of the inspection All records and documents were on file at the plant and available for review.
Requirement: Is the facility required to prepare and implement a groundwater protection plan (GPP) as specified in regulation 401 KAR 5:037? If yes, does the facility have a GPP? [401 KAR 5:037 Section 3]
Compliance Status: C-No Violations observed
Comment: The facility has a GPP and was reviewed during the inspection.
Requirement: Is the permittee reporting monitoring results to the cabinet at the intervals specified in the permit? [401 KAR 5:065 Section 2(1)]
Compliance Status: C-No Violations observed
Comment: The permittee is properly reporting monitoring results to the cabinet at intervals according to the KPEDS permit.
Requirement: Are the monitoring results reported to the cabinet on a Discharge Monitoring Report (DMR)? [401 KAR 5:065 Section 2(1)]
Compliance Status: C-No Violations observed
Comment: All monitoring results are being reported using DMR to the cabinet.
Requirement: If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR Part 136 or as specified in the permit, are the results of this monitoring included in the calculation and reporting of the data submitted in the DMR? [401 KAR 5:065 Section 2(1)]
Compliance Status: C-No Violations observed
Comment:
Requirement: Are the calculations for all limitations which require averaging of measurements utilizing an arithmetic mean unless otherwise specified by the Cabinet in the permit? [401 KAR 5:065 Section 2(1)]
Compliance Status: C-No Violations observed
Comment:
Requirement: Is the permittee in compliance for the reporting of spills, bypasses, and non-compliance according 401 KAR 5:065 Section 2(1)
Compliance Status: C-No Violations observed
Comment: Overflows are regularly reported by Danny Stinson to the Columbia Office. The collection system has been working to improve their infrastructure to help alleviate the inflow problem during rain events.
Requirement: Did the facility notify the Division of Water by the most rapid means available whenever, by reason of emergency or accident, a spill or discharge occurs which results in pollution of the waters of the Commonwealth? [401 KAR 5:015 Section 2]
Compliance Status: C-No Violations observed
Comment: All discharges are reported in a timely manner to the Columbia Office.
Requirement: Is the facility being properly operated and maintained as specified in regulation 5:065? This includes: (a) proper operation and maintenance of all facilities, systems of treatment and control, and related appurtenances which are installed or used by the permittee to achieve compliance with permit conditions; (b) proper operation and maintenance also includes adequate laboratory controls, and appropriate quality assurance procedures; (c) this provision also requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. [401 KAR 5:065 Section 2(1)]
Compliance Status: C-No Violations observed
Comment: At the time of the inspection the facility's equipment was working properly and a preventative maintenance schedule was available for review which was up to date.
Requirement: Are the disinfection unit(s) maintained and operated properly to allow for compliance with permit conditions? [401 KAR 5:005 Section 11]
Compliance Status: C-No Violations observed
Comment:
Requirement: Does the flow measuring device measure all flow received at the WWTP? For large wastewater facilities (average daily design capacity >50, 000 gpd), is flow measured by an indicating, recording, and totalizing flow measuring device? [401 KAR 5:005 Section 12]
Compliance Status: C-No Violations observed
Comment: A new pump station has been installed and is on line behind the Tompkinsville jail. The increased flow from the pump station is evident by the increased flow readings on the WWTP influent flow charts at the plant.

Requirement: Is a source of water provided for cleanup? If potable water is used, is a backflow preventor installed to protect the water supply? [401 KAR 5:005 Section 10(6)]

Compliance Status: C-No Violations observed

Comment: City water is used for cleanup at the plant with no issues.

Requirement: Has fencing with a lockable gate been installed around the wastewater treatment plant? [401 KAR 5:005 Section 10(7)]

Compliance Status: C-No Violations observed

Comment: Fencing is up with lockable gates with no issues at the time of the inspection.

Requirement: Has an all-weather access road been installed to allow access to the wastewater treatment plant? Is the road adequately maintained to allow access to the facility for operation and maintenance activity? [401 KAR 5:005 Section 10(8)]

Compliance Status: C-No Violations observed

Comment: The road leading to the plant is maintained and accessible.

Requirement: Sewage sludge. Did the facility meet the requirements governing the disposal of sewage sludge from publicly owned treatment works, in accordance with 40 CFR Part 503? [401 KAR 5:065 Section 2(4)]

Compliance Status: C-No Violations observed

Comment: Sludge is belt pressed at the plant and hauled to the Upper Cumberland Landfill in Tennessee. All of the records were on site at the time of the inspection.

Requirement: Is the effluent in compliance with KPDES permit limitations? Do the Discharge Monitoring Reports indicate KPDES permit violations? [401 KAR 5:065 Section 2(1)]. [401 KAR 5:065 Section 2(1)]

Compliance Status: D-Out of Compliance-Violations Documented

Comment: The facility has failed to comply with the effluent limitations contained in the permit. A DMR review from June 2015 through December 2015 showed the following excursions:

June 2015- Total Cl2

July 2015 - E.coli

August 2015- DO %, E.coli

September 2015- Do%, Total Cl2

November 2015- Solids Suspended % removal.

Requirement: Are samples taken in compliance with the monitoring requirements and taken at the following location(s): nearest accessible point after final treatment, but prior to actual discharge or mixing with receiving waters? Are the samples representative of plant flow? Are flow proportioned samples obtained when required by the KPDES permit? Are grab samples collected according to the KPDES permit requirements? Are composite samples collected and analyzed according to the KPDES permit conditions? Are samples collected according to KPDES permit requirements? [401 KAR 5:065 Section 2(1)]

Compliance Status: C-No Violations observed

Comment: No issues were noticed with the sampling procedures at the facility. A 24 hour composite sampler is being used to gather the influent and effluent samplers with no issues noticed. The staff has been recording slope on the pH meter as millivolts and not as a percentage. Recording in millivolts is acceptable according to the permit. pH buffer solutions were checked and are good through February 2017.

Requirement: Are the facility sample collection procedures adequate? Are the samples collected in proper containers, preserved, and refrigerated properly? Are all samples analyzed within the allowed holding times? [401 KAR 5:065 Section 2(1)]

Compliance Status: C-No Violations observed

Comment: No issues were noticed with the sampling procedures at the facility. A 24 hour composite sampler is being used to gather the influent and effluent samplers with no issues noticed.

Requirement: Is the facility sampling in accordance with sampling requirements specified for biomonitoring in the KPDES permit conditions? [401 KAR 5:065 Section 2(1)]

Compliance Status: C-No Violations observed

Comment:

Requirement: Have pollutants entered the waters of the Commonwealth? [KRS 224.70-110]

Compliance Status: C-No Violations observed

Comment: Pollutants have not entered the waters of the Commonwealth of Kentucky

Requirement: Have surface waters been aesthetically or otherwise degraded? [401 KAR 10:031 Section 2]

Compliance Status: C-No Violations observed

Comment: Surface waters have not been degraded.

Requirement: Is the permittee in compliance with all permit conditions? [401 KAR 5:065 Section 2]

Compliance Status: D-Out of Compliance-Violations Documented

Comment: The facility has failed to comply with the terms of the permit. A DMR review from June 2015 through December 2015 showed the following excursions:

June 2015- Total Cl2

July 2015 - E.coli

August 2015- DO %, E.coli

September 2015- Do%, Total Cl2

November 2015- Solids Suspended % removal.

Documentation

- ☐ **Photos taken**
- ☐ **Documents obtained from facility**
- ☐ **Samples taken by outside source**
- ☐ **Request for Submission of Documents**

- ☐ **Record of visual determination of opacity**
- ☐ **Samples taken by DEP**
- ☐ **Regional office instrument readings taken**
- ☐ **Other documentation**

Inspector:



Date: January 19, 2016

MATTHEW G. BEVIN
GOVERNOR



CHARLES G. SNAVELY
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF ENFORCEMENT
300 SOWER BOULEVARD
FRANKFORT KENTUCKY 40601
www.kentucky.gov

July 28, 2016

CERTIFIED MAIL No. 7012 3460 0003 0891 1841
Return Receipt Requested

Tompkinsville WWTP
The Honorable Scotty D. Turner
206 N Magnolia St
Tompkinsville, KY 42167

Re: Notice of Violation
AI ID: 3174
AI Name: Tompkinsville WWTP
Activity ID: ENV20160001
Facility No. KY0020702
Monroe County, KY

Dear Mayor Turner:

The Kentucky Department for Environmental Protection (DEP) has issued the enclosed Notice of Violation for violations discovered at your facility. Please review this Notice of Violation carefully to ensure that all remedial measures are completed by the specified deadlines.

Your cooperation and attention to this matter is appreciated. If you have any questions, please contact me at (502) 782-6860.

Sincerely,

A handwritten signature in black ink, appearing to read "Michelle M. Rice".

Michelle M. Rice
Environmental Scientist IV
Compliance and Operations Branch

Enclosure

**COMMONWEALTH OF KENTUCKY
ENERGY and ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Enforcement**

NOTICE OF VIOLATION

To: Tompkinsville WWTP
The Honorable Scotty D. Turner
206 N Magnolia St
Tompkinsville, KY 42167

AI Name: Tompkinsville WWTP **AI ID:** 3174 **Activity ID:** ENV20160001
County: Monroe
Facility Number: KY0020702
Date(s) Violation(s) Observed: 07/27/2016

This is to advise that you are in violation of the provisions cited below:

- 1** Violation Description for Subject Item AIOO0000003174():
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

Description of Non Compliance:

Failing to comply with 401 KAR 5:065, which cites 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0020702, Outfall 001-1, for Total Suspended Solids (TSS) during the months of April 2015 and February 2016. The permitted limits for TSS Loading are a monthly average of 168 lbs/day and a maximum weekly average of 251 lbs/day. The reported results were a maximum weekly average of 278.586 lbs/day for April 2015; and a monthly average of 221.469 lbs/day and a maximum weekly average of 360.238 lbs/day for February 2016. The permitted limits for TSS Concentration are a monthly average of 30 mg/l and a maximum weekly average of 45 mg/l. The reported result was a maximum weekly average of 46 mg/l for February 2016.

The remedial measure(s), and date(s) to be completed by are as follows:

Tompkinsville WWTP shall develop and submit a Corrective Action Plan: **Due 08/29/2016**. This plan shall provide a detailed written explanation of reasons for the violation, what is being done to maintain compliance at the facility, and a proposed schedule specifying when the corrective actions are to be completed. The KDEP will continue to monitor your DMRs. [KRS 224.70-110]

- 2** Violation Description for Subject Item AIOO0000003174():
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

Description of Non Compliance:

Failing to comply with 401 KAR 5:065, which cites 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0020702, Outfall 001-1, for Total Residual Chlorine (TRC) during the months of April, May, June, and September 2015; and January 2016. The permitted limits for TRC Concentration are a monthly average of 0.011 mg/l and a daily maximum of 0.019 mg/l. The reported results were a monthly average of 0.014 mg/l and a daily maximum of 0.024 mg/l for April 2015; a monthly average of 0.016 mg/l for May 2015; a monthly average of 0.013 mg/l for June 2015; a monthly average of 0.013 mg/l for September 2015; and a monthly average of 0.24 mg/l and a daily maximum of 0.91 mg/l for January 2016.

The remedial measure(s), and date(s) to be completed by are as follows:

Tompkinsville WWTP shall develop and submit a Corrective Action Plan: **Due 08/29/2016**. This plan shall provide a detailed written explanation of reasons for the violation, what is being done to maintain compliance at the facility, and a proposed schedule specifying when the corrective actions are to be completed. The KDEP will continue to monitor your DMRs. [KRS 224.70-110]

3 Violation Description for Subject Item AIOO0000003174():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

Description of Non Compliance:

Failing to comply with 401 KAR 5:065, which cites 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0020702, Outfall 001-1, for Biochemical Oxygen Demand (BOD) during the month of April 2015. The permitted limits for BOD Loading are a monthly average of 112 lbs/day and a maximum weekly average of 168 lbs/day. The reported result was a maximum weekly average of 388.194 lbs/day. The permitted limits for BOD Concentration are a monthly average of 20 mg/l and a maximum weekly average of 30 mg/l. The reported result was a maximum weekly average of 34 mg/l.

The remedial measure(s), and date(s) to be completed by are as follows:

Tompkinsville WWTP shall develop and submit a Corrective Action Plan: **Due 08/29/2016**. This plan shall provide a detailed written explanation of reasons for the violation, what is being done to maintain compliance at the facility, and a proposed schedule specifying when the corrective actions are to be completed. The KDEP will continue to monitor your DMRs. [KRS 224.70-110]

4 Violation Description for Subject Item AIOO0000003174():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

Description of Non Compliance:

Failing to comply with 401 KAR 5:065, which cites 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0020702, Outfall 001-1, for E. Coli during the months of May, July, and August 2015; and February 2016. The permitted limits for E. Coli Concentration are a 30-day geometric mean of 130 per 100ml and a 7-day geometric mean of 240 per 100ml. The reported results were a 7-day geometric mean of 387 per 100ml for May 2015; a 7-day geometric mean of 291 per 100ml for July 2015; a 7-day geometric mean of 687 per 100ml for August 2015; and a 7-day geometric mean of 1733 per 100ml for February 2016.

The remedial measure(s), and date(s) to be completed by are as follows:

Tompkinsville WWTP shall develop and submit a Corrective Action Plan: **Due 08/29/2016**. This plan shall provide a detailed written explanation of reasons for the violation, what is being done to maintain compliance at the facility, and a proposed schedule specifying when the corrective actions are to be completed. The KDEP will continue to monitor your DMRs. [KRS 224.70-110]

5 Violation Description for Subject Item AIOO0000003174():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

Description of Non Compliance:

Failing to comply with 401 KAR 5:065, which cites 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0020702, Outfall 001-1, for Dissolved Oxygen (DO) during the months of August, September, and December 2015. The permitted limit for DO Concentration is a minimum of 7 mg/l. The reported results were a minimum of 6.8 mg/l for August 2015; a minimum of 6.8 mg/l for September 2015; and a minimum of 6 mg/l for December 2015.

The remedial measure(s), and date(s) to be completed by are as follows:

Tompkinsville WWTP shall develop and submit a Corrective Action Plan: **Due 08/29/2016**. This plan shall provide a detailed written explanation of reasons for the violation, what is being done to maintain compliance at the facility, and a proposed schedule specifying when the corrective actions are to be completed. The KDEP will continue to monitor your DMRs. [KRS 224.70-110]

6 Violation Description for Subject Item AIOO0000003174():

No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

Description of Non Compliance:

Failing to comply with 401 KAR 5:065, which cites 40 CFR 122.41(a), by failing to comply with the terms and conditions of KPDES Permit No. KY0020702, Outfall 001-1, for Suspended Solids Percent Removal (SS%) during the months of November and December 2015; and January and February 2016. The permitted limit for SS% Concentration is a monthly minimum of 85 percent (%). The reported results were a monthly minimum of 81% for November 2015; a monthly minimum of 82% for December 2015; a monthly minimum of 84% for January 2016; and a monthly minimum of 54% for February 2016.

The remedial measure(s), and date(s) to be completed by are as follows:

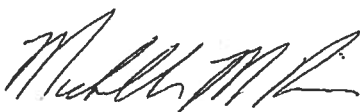
Tompkinsville WWTP shall develop and submit a Corrective Action Plan: **Due 08/29/2016**. This plan shall provide a detailed written explanation of reasons for the violation, what is being done to maintain compliance at the facility, and a proposed schedule specifying when the corrective actions are to be completed. The KDEP will continue to monitor your DMRs. [KRS 224.70-110]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection
Division of Enforcement
300 Sower Blvd, 3rd Floor
Frankfort, KY 40601
502-782-6860 (7:30 AM – 3:30 PM)
Michelle Rice, Environmental Scientist IV

Issued By:



Michelle M. Rice
Environmental Scientist IV
Compliance and Operations Branch
Date: July 28, 2016

How Delivered: Certified Mail Certified/Registered # 7012 3460 0003 0891 1841



MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

AARON B. KEATLEY
COMMISSIONER

DIVISION OF WATER
2751 CAMPBELLSVILLE RD
COLUMBIA, KY, 42728

February 27, 2017

City of Tompkinsville
Attn: Mayor Scotty Turner
206 N Magnolia St.
Tompkinsville, KY 42167

RE: Tompkinsville WWTP -- 3174
Permit No.: KY0020702
Monroe County, Kentucky
Activity ID: CIN20170002

Dear Mayor Turner:

Attached for your information and records is a copy of the **WW Routine-Minor Mun I** performed at **Tompkinsville WWTP** on **February 23, 2017**. At the time of the inspection your facility reviewed a rating of No Violations Observed.

- It is recommended to replace the broken window on the Chlorine room door due to a safety issue. Also it is recommended to calibrate the leak detector in the chlorine room.

If you have any questions or comments concerning this inspection, please contact the **Columbia Regional Office** at: (270) 384-4734.

Sincerely,

Josh Pedigo
Environmental Scientist
Columbia Regional Office
Division of Water

Enclosure:



Energy and Environment Cabinet
Department for Environmental Protection
Division of Water
Wastewater Inspection Report

AI ID: 3174 **AI Type:** SANI-Wastewater Treatment & Collection (2213)
AI Name: Tompkinsville WWTP
AI Address: Poplar Log Rd
City: Tompkinsville, **State:** Kentucky **Zip:** 42167
County: Monroe **Regional Office:** Columbia Regional Office
Latitude: 36.7 **Longitude:** -85.706389
Inspection Type: WW Routine-Minor Mun **Activity #:** CIN20170002
Inspection Start Date: February 23, 2017 **End Date:** February 23, 2017
Site/Permit ID: KY0020702

Lead DEP Investigator: Josh Pedigo
Persons Interviewed: Ricky Hammer ; Randle Hagen

General Comments: On February 23, 2017 Josh Pedigo did an inspection on Tompkinsville WWTP. At the time of the inspection the plant was running well, the Effluent was a little cloudy but other than that the plant was in fair shape. Mr. Hammer indicated that there were two new hires working at the plant. Neither of which had any prior WWTP experience. Also Randle Hagen has come back to work part time at the WWTP.
Overall Compliance Status: No Violations Observed

Investigation Results

SI: AIOO3174

SI Description:

Inspector Comment:

Requirement: Does the facility hold the proper KPDES permit?. [401 KAR 5:055 Section 2]

Compliance Status: C-No Violations observed

Comment: KPDES permit # KY0020702

Requirement: Is the facility being operated under the supervision of a properly certified operator? [401 KAR 5:010 Section 1]. [401 KAR 5:010 Section 1]

Compliance Status: C-No Violations observed

Comment: Ricky Hammer WW Class II
Randle Hagen WW Class II

Requirement: Is the collection system under the primary responsibility of an individual who holds an active collection system certification at the level appropriate for the size of the treatment facility receiving the waste? [401 KAR 5:010 Section 2]. [401 KAR 5:010 Section 2]

Compliance Status: C-No Violations observed

Comment: Timmy Walden Collections class II

Requirement: Is the facility being properly operated and maintained as specified in regulation 5:065? This includes:
(a) proper operation and maintenance of all facilities, systems of treatment and control, and related appurtenances which are installed or used by the permittee to achieve compliance with permit conditions;
(b) proper operation and maintenance also includes adequate laboratory controls, and appropriate quality assurance procedures;
(c) this provision also requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. [401 KAR 5:065 Section 2(1)]. [401 KAR 5:065 Section 2(1)]

Compliance Status: C-No Violations observed

Comment: At the time of the inspection the plant was running well, the Effluent was a little cloudy but other than that

the plant was in fair shape. All records and documents were available for review.

Requirement: Are the disinfection unit(s) maintained and operated properly to allow for compliance with permit conditions? [401 KAR 5:005 Section 11]. [401 KAR 5:005 Section 11]

Compliance Status: C-No Violations observed

Comment: A DMR review showed no excursions.

Requirement: Have pollutants entered the waters of the Commonwealth? [KRS 224.70-110]. [KRS 224.70-110]

Compliance Status: C-No Violations observed

Comment: Pollutants have not entered the waters of the Commonwealth of Kentucky.

Requirement: Have surface waters been aesthetically or otherwise degraded? [401 KAR 10:031 Section 2]. [401 KAR 10:031 Section 2]

Compliance Status: C-No Violations observed

Comment: Surface waters have not been degraded.

Documentation

☒ **Photos taken**

☐ **Documents obtained from facility**

☐ **Samples taken by outside source**

☐ **Request for Submission of Documents**

☐ **Record of visual determination of opacity**

☐ **Samples taken by DEP**

☐ **Regional office instrument readings taken**

☐ **Other documentation**

Inspector:



Date: March 1, 2017

MATTHEW G. BEVIN
GOVERNOR



CHARLES G. SNAVELY
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
2751 CAMPBELLSVILLE ROAD
COLUMBIA KY 42728

AARON B. KEATLEY
COMMISSIONER

January 19, 2017

Certified No. 7007 0710 0004 5903 4214
Return Receipt Requested

City of Tompkinsville
Mayor Scotty D. Turner
206 N Magnolia St
Tompkinsville, KY 42167

Re: Notice of Violation
AI ID: 3174
AI Name: Tompkinsville WWTP
Activity ID: ENV20170001
Permit No. KY0020702
Monroe County, KY

Dear Mayor Scotty D. Turner:

The Kentucky Department for Environmental Protection (DEP) has issued the enclosed Notice of Violation for violations discovered at your facility during an inspection conducted on January 13, 2017. Please review this Notice of Violation carefully to ensure that all remedial measures are completed by the specified deadlines.

- **Within thirty (30) days from the receipt of this notice, the permittee shall ensure the collection system is under the primary responsibility of an individual holding an active collection or treatment system certification at a level appropriate for the size of the collection or treatment facility receiving the sewage.**

Your cooperation and attention to this matter is appreciated. If you have any questions, please contact me at 270-384-4734.

Sincerely,

A handwritten signature in black ink, appearing to read "Josh Pedigo".

Josh Pedigo,
Environmental Scientist
Division of Water

Enclosure

COMMONWEALTH OF KENTUCKY
ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water

NOTICE OF VIOLATION

To: Mayor Scotty D. Turner
206 N Magnolia St
Tompkinsville, KY 42167

AI Name: Tompkinsville WWTP **AI ID:** 3174 **Activity ID:** ENV20170001
Discovery ID: CIN20170001 **County:** Monroe
Enforcement Case ID:
Date(s) Violation(s) Observed: 01/13/2017

This is to advise that you are in violation of the provisions cited below:

1 Violation Description for Subject Item AIOO0000003174Q:

Each wastewater collection system which contains domestic sewage and consists of at least 5,000 linear feet of sewer line as described in 401 KAR 5:010 Section 2(1), (6), or (7)(a) or (e) shall be operated under the supervision of an individual holding a Kentucky collection system operator's certificate for at least the class of treatment or collection system supervised. [401 KAR 5:010 Section 2]

Description of Non Compliance:

The facility is not operated under the supervision of a properly certified collection system operator. No one in the system has a collection license at this time.

The remedial measure(s), and date(s) to be completed by are as follows:

Within thirty (30) days from the receipt of this notice, the permittee shall ensure the collection system is under the primary responsibility of an individual holding an active collection or treatment system certification at a level appropriate for the size of the collection or treatment facility receiving the sewage. The permittee shall submit written notification to the undersigned that the facility is in compliance with the requirements of this regulation. Failure to comply with the remedial measures or repeated violations of this requirement may subject you and/or your company to an immediate referral to the Division of Enforcement. [401 KAR 5:010 Section 2]

2 Violation Description for Subject Item AIOO0000003174Q:

All wastewater treatment plants shall have a disinfection process which meets the following requirements: An ultraviolet disinfection system designed to treat the anticipated peak hourly flow; a chlorination system with a flow or demand proportional feed system. The chlorine contact tank shall have a minimum detention time of thirty (30) minutes based on the average flow, or fifteen (15) minutes based on the peak hourly flow, whichever requires the larger tank size. Wastewater treatment plants shall also have a dechlorination system with a flow or demand proportional feed system if necessary to meet the effluent limits; or a chlorination system with a manually controlled feed system and a flow equalization basin designed to eliminate the diurnal flow variations. Tablet type chlorination equipment shall not be used in an intermediate or large WWTP. [401 KAR 5:005 Section 11]

Description of Non Compliance:

The facility has failed to properly maintain and / or operate the disinfection unit. The Chlorine line leading into the contact tank had broken sometime in February allowing E.coli excursions to occur until September. This issue was not reported to Division of Water.

The remedial measure(s), and date(s) to be completed by are as follows:

The permittee must immediately maintain and operate the disinfection unit to allow for compliance with permit conditions. Failure to comply with the remedial measures or repeated violations of this requirement may subject you and/or your company to an immediate referral to the Division of Enforcement. [401 KAR 5:005 Section 11]

3 Violation Description for Subject Item AIOO00000031740:

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and KRS 224 and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. [401 KAR 5:065 Section 2(1)]

Description of Non Compliance:

The facility has failed to comply with the effluent limitations contained in the permit. A DMR review from January 2016 through December 2016 showed the following excursions;

Jan- Total Cl2, % removal

Feb- TSS, E.coli, % removal

May- E.coli

June-E.coli

July- E.coli

Aug- E.coli

Sept- E.coli

The remedial measure(s), and date(s) to be completed by are as follows:

The permittee must comply with effluent limitations and all conditions of the KPDES permit. Within thirty (30) days of the receipt of this notice, the permittee shall submit a written notification to the undersigned that the permittee complies with all requirements of its permit. Failure to comply with the remedial measures or repeated violations of this requirement may subject you and/or your company to an immediate referral to the Division of Enforcement. [401 KAR 5:065 Section 2(1)]

4 Violation Description for Subject Item AIOO00000031740:

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and KRS 224 and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. [401 KAR 5:065 Section 2] as in [40 C.F.R. 122.41(a)].

Description of Non Compliance:

The facility has failed to comply with the terms of the permit. A DMR review from January 2016 through December 2016 showed the following excursions;

Jan- Total Cl2, % removal

Feb- TSS, E.coli, % removal

May- E.coli

June-E.coli

July- E.coli

Aug- E.coli

Sept- E.coli

The remedial measure(s), and date(s) to be completed by are as follows:

Comply with all conditions of the KPDES permit. Failure to comply with the remedial measures or repeated violations of this requirement may subject you and/or your company to an immediate referral to the Division of Enforcement. [401 KAR 5:065 Section 2]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to \$25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

If you have questions or need further information, write or call the undersigned:

Division of Water
Columbia Regional Office
2751 Campbellsville Rd
Columbia, KY 42728
270-384-4734 (8:00 AM – 4:30 PM)
Josh Pedigo, Environmental Scientist

Issued By:



Josh Pedigo, Environmental Scientist

Date: January 19, 2017

Issued By:



Brian Crump, Environmental Control Supervisor

Date: January 19, 2017

How Delivered: Certified

Certified/Registered # 7007 0710 0004 5903 4214

Energy and Environment Cabinet
Department for Environmental Protection
Division of Water
Wastewater Inspection Report

AI ID: 3174 **AI Type:** SANI-Wastewater Treatment & Collection (2213)
AI Name: Tompkinsville WWTP
AI Address: Poplar Log Rd
City: Tompkinsville, **State:** Kentucky **Zip:** 42167
County: Monroe **Regional Office:** Columbia Regional Office
Latitude: 36.7 **Longitude:** -85.706389
Inspection Type: WW CEI-Minor Mun **Activity #:** CIN20170001
Inspection Start Date: January 13, 2017 **End Date:** January 13, 2017
Site/Permit ID: KY0020702

Lead DEP Investigator: Josh Pedigo
Persons Interviewed: Ricky Hammer

General Comments: On January 13, 2017 Josh Pedigo did an inspection on Tompkinsville WWTP. At the time of the inspection the plant was running well, the Effluent was a little cloudy but other than that the plant was in fair shape. Mr. Hammer indicated that there were two new hires working at the plant. Neither of which had any prior WWTP experience. A DMR review showed numerous E.coli excursions over a six month period of time this past year. When asked Mr. Hammer indicated that the Chlorine line going into the contact tank had broken and they did not notice but eventually found the problem and fixed the issue.
Overall Compliance Status: Out of Compliance- NOV

Investigation Results

SI: AIOO3174

SI Description:

Inspector Comment:

Requirement: Does the facility hold the proper KPDES permit?. [401 KAR 5:055 Section 2]

Compliance Status: C-No Violations observed

Comment: KPDES permit # KY0020702

Requirement: Have all required permits been obtained from the Division of Water prior to the construction or modification of the facility? [401 KAR 5:005 Section 1]

Compliance Status: C-No Violations observed

Comment: KPDES permit # KY0020702

Requirement: Is the facility being operated under the supervision of a properly certified operator? [401 KAR 5:010 Section 1]

Compliance Status: C-No Violations observed

Comment: Ricky Hammer class II # 16382

Requirement: Is the collection system under the primary responsibility of an individual who holds an active collection system certification at the level appropriate for the size of the treatment facility receiving the waste? [401 KAR 5:010 Section 2]

Compliance Status: V-Out of Compliance-NOV

Comment: The facility is not operated under the supervision of a properly certified collection system operator. No one in the system has a collection license at this time.

Requirement: Does the permittee retain records of all monitoring information including: the date, exact place, and time of sampling or measurements; the name of the individual who performed the sampling or measurements; the dates and times analyses were performed; the name of the individual who performed the analyses; the analytical techniques or methods used; the results of the analyses; all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation; copies of all reports required by this permit; and records of all

data used to complete the application for this permit, for the period required by the cabinet and at a minimum of at least three (3) years from the date of the sample, measurement, report, or application? [401 KAR 5:065 Section 2(1)]
Compliance Status: C-No Violations observed
Comment: At the time of the inspection all records and documents were in order and available for review.
Requirement: Is the facility required to prepare and implement a groundwater protection plan (GPP) as specified in regulation 401 KAR 5:037? If yes, does the facility have a GPP? [401 KAR 5:037 Section 3]
Compliance Status: C-No Violations observed
Comment: The facility has a GPP and was reviewed during the inspection.
Requirement: Is the permittee reporting monitoring results to the cabinet at the intervals specified in the permit? [401 KAR 5:065 Section 2(1)]
Compliance Status: C-No Violations observed
Comment: The permittee is properly reporting monitoring results to the cabinet at intervals according to the KPDES permit.
Requirement: Are the monitoring results reported to the cabinet on a Discharge Monitoring Report (DMR)? [401 KAR 5:065 Section 2(1)]
Compliance Status: C-No Violations observed
Comment: All monitoring results are being reported using DMR.
Requirement: If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR Part 136 or as specified in the permit, are the results of this monitoring included in the calculation and reporting of the data submitted in the DMR? [401 KAR 5:065 Section 2(1)]
Compliance Status: C-No Violations observed
Comment:
Requirement: Are the calculations for all limitations which require averaging of measurements utilizing an arithmetic mean unless otherwise specified by the Cabinet in the permit? [401 KAR 5:065 Section 2(1)]
Compliance Status: C-No Violations observed
Comment:
Requirement: Is the permittee in compliance for the reporting of spills, bypasses, and non-compliance according 401 KAR 5:065 Section 2(1)
Compliance Status: C-No Violations observed
Comment: Overflows and bypasses are reported to the Division of Water.
Requirement: Did the facility notify the Division of Water by the most rapid means available whenever, by reason of emergency or accident, a spill or discharge occurs which results in pollution of the waters of the Commonwealth? [401 KAR 5:015 Section 2]
Compliance Status: C-No Violations observed
Comment: Overflows and bypasses are reported to the Division of Water.
Requirement: Is the facility being properly operated and maintained as specified in regulation 5:065? This includes: (a) proper operation and maintenance of all facilities, systems of treatment and control, and related appurtenances which are installed or used by the permittee to achieve compliance with permit conditions; (b) proper operation and maintenance also includes adequate laboratory controls, and appropriate quality assurance procedures; (c) this provision also requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. [401 KAR 5:065 Section 2(1)]
Compliance Status: C-No Violations observed
Comment: At the time of the inspection the facility's equipment was working properly and a preventative maintenance schedule was available to review.
Requirement: Are the disinfection unit(s) maintained and operated properly to allow for compliance with permit conditions? [401 KAR 5:005 Section 11]
Compliance Status: V-Out of Compliance-NOV
Comment: The facility has failed to properly maintain and / or operate the disinfection unit. The Chlorine line leading into the contact tank had broken sometime in February allowing E.coli excursions to occur until September. This issue was not reported to Division of Water.
Requirement: Does the flow measuring device measure all flow received at the WWTP? For large wastewater facilities (average daily design capacity >50, 000 gpd), is flow measured by an indicating, recording, and totalizing flow measuring device? [401 KAR 5:005 Section 12]
Compliance Status: C-No Violations observed

Comment: All flow measuring devices both Influent and Effluent are working properly.

Requirement: Is a source of water provided for cleanup? If potable water is used, is a backflow preventor installed to protect the water supply? [401 KAR 5:005 Section 10(6)]

Compliance Status: C-No Violations observed

Comment: City water is used for cleanup.

Requirement: Has fencing with a lockable gate been installed around the wastewater treatment plant? [401 KAR 5:005 Section 10(7)]

Compliance Status: C-No Violations observed

Comment: Fencing is up with lockable gates with no issues noticed.

Requirement: Has an all-weather access road been installed to allow access to the wastewater treatment plant? Is the road adequately maintained to allow access to the facility for operation and maintenance activity? [401 KAR 5:005 Section 10(8)]

Compliance Status: C-No Violations observed

Comment: The road leading to the plant is in good shape.

Requirement: Sewage sludge. Did the facility meet the requirements governing the disposal of sewage sludge from publicly owned treatment works, in accordance with 40 CFR Part 503? [401 KAR 5:065 Section 2(4)]

Compliance Status: C-No Violations observed

Comment: Sludge is belt pressed and hauled to the Upper Cumberland Landfill in Tennessee.

Requirement: Is the effluent in compliance with KPDES permit limitations? Do the Discharge Monitoring Reports indicate KPDES permit violations? [401 KAR 5:065 Section 2(1)]. [401 KAR 5:065 Section 2(1)]

Compliance Status: V-Out of Compliance-NOV

Comment: The facility has failed to comply with the effluent limitations contained in the permit. A DMR review from January 2016 through December 2016 showed the following excursions;

Jan- Total Cl₂, % removal

Feb- TSS, E.coli, % removal

May- E.coli

June-E.coli

July- E.coli

Aug- E.coli

Sept- E.coli

Requirement: Are samples taken in compliance with the monitoring requirements and taken at the following location(s): nearest accessible point after final treatment, but prior to actual discharge or mixing with receiving waters? Are the samples representative of plant flow? Are flow proportioned samples obtained when required by the KPDES permit? Are grab samples collected according to the KPDES permit requirements? Are composite samples collected and analyzed according to the KPDES permit conditions? Are samples collected according to KPDES permit requirements? [401 KAR 5:065 Section 2(1)]

Compliance Status: C-No Violations observed

Comment: No issues were noticed with the sampling procedures at the facility. A composite sampler is being used to gather the samples.

Requirement: Are the facility sample collection procedures adequate? Are the samples collected in proper containers, preserved, and refrigerated properly? Are all samples analyzed within the allowed holding times? [401 KAR 5:065 Section 2(1)]

Compliance Status: C-No Violations observed

Comment: No issues were noticed with the sampling procedures at the facility. A composite sampler is being used to gather the samples.

Requirement: Is the facility sampling in accordance with sampling requirements specified for biomonitoring in the KPDES permit conditions? [401 KAR 5:065 Section 2(1)]

Compliance Status: C-No Violations observed

Comment:

Requirement: Have pollutants entered the waters of the Commonwealth? [KRS 224.70-110]

Compliance Status: C-No Violations observed

Comment: Pollutants have not entered the waters of the Commonwealth of Kentucky

Requirement: Have surface waters been aesthetically or otherwise degraded? [401 KAR 10:031 Section 2]

Compliance Status: C-No Violations observed

Comment: Surface waters have not been degraded.

Requirement: Is the permittee in compliance with all permit conditions? [401 KAR 5:065 Section 2]

Compliance Status: V-Out of Compliance-NOV

Comment: The facility has failed to comply with the terms of the permit. A DMR review from January 2016 through December 2016 showed the following excursions;

Jan- Total Cl2, % removal

Feb- TSS, E.coli, % removal

May- E.coli

June-E.coli

July- E.coli

Aug- E.coli

Sept- E.coli

Documentation

☒ **Photos taken**

☐ **Documents obtained from facility**

☐ **Samples taken by outside source**

☐ **Request for Submission of Documents**

☐ **Record of visual determination of opacity**

☐ **Samples taken by DEP**

☐ **Regional office instrument readings taken**

☐ **Other documentation**

Inspector:



Date: January 19, 2017

Certified Mail Number: 7007 0710 0004 5903 4214



MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

AARON B. KEATLEY
COMMISSIONER

DIVISION OF WATER
2751 CAMPBELLSVILLE RD
COLUMBIA, KY, 42728

City of Tompkinsville
Attn: Mayor Scotty Turner
206 N Magnolia St.
Tompkinsville, KY 42167

July 14, 2017

RE: Tompkinsville WWTP -- 3174
Permit No.: KY0020702
Monroe County, Kentucky
Activity ID: CIN20170004

Dear Mayor Turner:

Attached for your information and records is a copy of the **WW Routine-Minor Mun** I performed at **Tompkinsville WWTP** on **July 12, 2017**. At the time of the inspection your facility reviewed a rating of **No Violations Observed**. The following issues need to be addressed;

- The drying beds were full of solids from the backwash lagoon at the WTP being dumped into them. The drying beds need to be cleaned out so there is not a discharge of any solids leaving the beds which will result in a violation.

If you have any questions or comments concerning this inspection, please contact the **Columbia Regional Office** at: (270) 384-4734.

Sincerely,

Josh Pedigo
Environmental Scientist
Columbia Regional Office
Division of Water

Enclosure:

Energy and Environment Cabinet
Department for Environmental Protection
Division of Water
Wastewater Inspection Report

AI ID: 3174 **AI Type:** SANI-Wastewater Treatment & Collection (2213)
AI Name: Tompkinsville WWTP
AI Address: Poplar Log Rd
City: Tompkinsville, **State:** Kentucky **Zip:** 42167
County: Monroe **Regional Office:** Columbia Regional Office
Latitude: 36.7 **Longitude:** -85.706389
Inspection Type: WW Routine-Minor Mun **Activity #:** CIN20170004
Inspection Start Date: July 12, 2017 **End Date:** July 12, 2017
Site/Permit ID: KY0020702

Lead DEP Investigator: Josh Pedigo
Other DEP Investigators: Brian Crump
Persons Interviewed: Ricky Hammer

General Comments: On July 12, 2017 Josh Pedigo and Brian Crump did an inspection at Tompkinsville WWTP. At the time of the inspection the plant was running well. The only issue that was noticed at the WWTP was that the drying beds were beginning to fill up due to solids from the backwash lagoon at the WTP being dumped into them. The drying beds need to be cleaned out so there is not a discharge of any solids leaving the beds which will result in a violation.

Overall Compliance Status: No Violations Observed

Investigation Results

SI: AIOO3174

SI Description:

Inspector Comment:

Requirement: Does the facility hold the proper KPDES permit?. [401 KAR 5:055 Section 2]

Compliance Status: C-No Violations observed

Comment: Permit # KY0020702

Requirement: Is the facility being operated under the supervision of a properly certified operator? [401 KAR 5:010 Section 1]. [401 KAR 5:010 Section 1]

Compliance Status: C-No Violations observed

Comment: Ricky Hammer Class II

Randle Hagen Class II

Requirement: Is the collection system under the primary responsibility of an individual who holds an active collection system certification at the level appropriate for the size of the treatment facility receiving the waste? [401 KAR 5:010 Section 2]. [401 KAR 5:010 Section 2]

Compliance Status: C-No Violations observed

Comment: Timmy Walden Class I

Requirement: Is the facility being properly operated and maintained as specified in regulation 5:065? This includes:
(a) proper operation and maintenance of all facilities, systems of treatment and control, and related appurtenances which are installed or used by the permittee to achieve compliance with permit conditions;
(b) proper operation and maintenance also includes adequate laboratory controls, and appropriate quality assurance procedures;
(c) this provision also requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. [401 KAR 5:065 Section 2(1)]. [401 KAR 5:065 Section 2(1)]

Compliance Status: C-No Violations observed

Comment: At the time of the inspection the plant was running well. The only issue that was noticed at the WWTP was that the drying beds were beginning to fill up due to solids from the backwash lagoon at the WTP being dumped into them. The drying beds need to be cleaned out so there is not a discharge of any solids leaving the beds which will result in a violation.

Requirement: Are the disinfection unit(s) maintained and operated properly to allow for compliance with permit conditions? [401 KAR 5:005 Section 11]. [401 KAR 5:005 Section 11]

Compliance Status: C-No Violations observed

Comment: A DMR review showed no excursions.

Requirement: Have pollutants entered the waters of the Commonwealth? [KRS 224.70-110]. [KRS 224.70-110]

Compliance Status: C-No Violations observed

Comment: Pollutants have not entered the waters of the Commonwealth of Kentucky

Requirement: Have surface waters been aesthetically or otherwise degraded? [401 KAR 10:031 Section 2]. [401 KAR 10:031 Section 2]

Compliance Status: C-No Violations observed

Comment: Surface waters have not been degraded.

Documentation

- ☒ **Photos taken**
- ☐ **Documents obtained from facility**
- ☐ **Samples taken by outside source**
- ☐ **Request for Submission of Documents**

- ☐ **Record of visual determination of opacity**
- ☐ **Samples taken by DEP**
- ☐ **Regional office instrument readings taken**
- ☐ **Other documentation**

Inspector:



Date: July 17, 2017



MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

AARON B. KEATLEY
COMMISSIONER

DIVISION OF WATER
2751 CAMPBELLSVILLE RD
COLUMBIA, KY, 42728

May 25, 2017

City of Tompkinsville
Attn: Mayor Scotty Turner
206 N Magnolia St.
Tompkinsville, KY 42167

RE: Tompkinsville WWTP -- 3174
Permit No.: KY0020702
Monroe County, Kentucky
Activity ID: CIN20170003

Dear Mayor Turner:

Attached for your information and records is a copy of the **WW Routine-Minor Mun I** performed at **Tompkinsville WWTP** on **May 24, 2017**. At the time of the inspection your facility reviewed a rating of **No Violations Observed - But Impending Violation Trends due to the following**;

- The drying beds were full of solids from the backwash lagoon at the WTP being dumped into them. The drying beds need to be cleaned out so there is not a discharge of any solids leaving the beds.

If you have any questions or comments concerning this inspection, please contact the **Columbia Regional Office** at: (270) 384-4734.

Sincerely,

Josh Pedigo
Environmental Scientist
Columbia Regional Office
Division of Water

Enclosure:

Energy and Environment Cabinet
Department for Environmental Protection
Division of Water
Wastewater Inspection Report

AI ID: 3174 **AI Type:** SANI-Wastewater Treatment & Collection (2213)
AI Name: Tompkinsville WWTP
AI Address: Poplar Log Rd
City: Tompkinsville, **State:** Kentucky **Zip:** 42167
County: Monroe **Regional Office:** Columbia Regional Office
Latitude: 36.7 **Longitude:** -85.706389
Inspection Type: WW Routine-Minor Mun **Activity #:** CIN20170003
Inspection Start Date: May 24, 2017 **End Date:** May 24, 2017
Site/Permit ID: KY0020702

Lead DEP Investigator: Josh Pedigo
Persons Interviewed: Ricky Hammer

General Comments: On May 24, 2017 Josh Pedigo did an inspection at Tompkinsville WWTP. At the time of the inspection the plant was running well. The only issue that was noticed at the WWTP was that the drying beds were full of solids from the backwash lagoon at the WTP being dumped into them. The drying beds need to be cleaned out so there is not a discharge of any solids leaving the beds which will result in a violation.

Overall Compliance Status: No Viol Obs- impend viol trend

Investigation Results

SI: AIOO3174

SI Description:

Inspector Comment:

Requirement: Does the facility hold the proper KPDES permit?. [401 KAR 5:055 Section 2]

Compliance Status: C-No Violations observed

Comment: KPDES permit # KY0020702

Requirement: Is the facility being operated under the supervision of a properly certified operator? [401 KAR 5:010 Section 1]. [401 KAR 5:010 Section 1]

Compliance Status: C-No Violations observed

Comment: Ricky Hammer WW Class II
Randle Hagen WW Class II

Requirement: Is the collection system under the primary responsibility of an individual who holds an active collection system certification at the level appropriate for the size of the treatment facility receiving the waste? [401 KAR 5:010 Section 2]. [401 KAR 5:010 Section 2]

Compliance Status: C-No Violations observed

Comment: Timmy Walden Collections Class I

Requirement: Is the facility being properly operated and maintained as specified in regulation 5:065? This includes:
(a) proper operation and maintenance of all facilities, systems of treatment and control, and related appurtenances which are installed or used by the permittee to achieve compliance with permit conditions;
(b) proper operation and maintenance also includes adequate laboratory controls, and appropriate quality assurance procedures;
(c) this provision also requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. [401 KAR 5:065 Section 2(1)]. [401 KAR 5:065 Section 2(1)]

Compliance Status: I-No Violations obs-but impending viol trends obs

Comment: At the time of the inspection the plant was running well. All records and documents were available for review. The only issue that was noticed at the WWTP was that the drying beds were full of solids from the backwash lagoon at the WTP being dumped into them. The drying beds need to be cleaned out so there is not a discharge of any solids leaving the beds which will result in a violation.

Requirement: Are the disinfection unit(s) maintained and operated properly to allow for compliance with permit conditions? [401 KAR 5:005 Section 11]. [401 KAR 5:005 Section 11]

Compliance Status: C-No Violations observed

Comment: A DMR review showed no excursions.

Requirement: Have pollutants entered the waters of the Commonwealth? [KRS 224.70-110]. [KRS 224.70-110]

Compliance Status: C-No Violations observed

Comment: Pollutants have not entered the waters of the Commonwealth of Kentucky.

Requirement: Have surface waters been aesthetically or otherwise degraded? [401 KAR 10:031 Section 2]. [401 KAR 10:031 Section 2]

Compliance Status: C-No Violations observed

Comment: Surface waters have not been degraded.

Documentation

- ☒ **Photos taken**
- ☐ **Documents obtained from facility**
- ☐ **Samples taken by outside source**
- ☐ **Request for Submission of Documents**

- ☐ **Record of visual determination of opacity**
- ☐ **Samples taken by DEP**
- ☐ **Regional office instrument readings taken**
- ☐ **Other documentation**

Inspector:



Date: May 25, 2017